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BIMETALLISM EXPLAINED

BIMETALLISM EXPLAINED

BY

WM. THOS. ROTHWELL

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PREFACE.

MANY books have been written both for and against bimetallism, but I have not met with one which has appeared to me to contain all the fundamental arguments which might be useful in guiding or forming the opinions of the general reader. The writers have almost invariably assumed on the part of the public a greater amount of special knowledge than experience warrants us in expecting it to possess. Many of the points in this book are to be found in one or other of the numerous works on the subject. But this one is published in the belief that all that is necessary for a clear understanding of the question is to be found in its pages. I hope that I have made it quite plain that the proposals of the bimetallists are founded on sound

policy, and that they may be justified practically as well as academically. It is not contended that bimetallism is a cure for every industrial evil. Nevertheless, its adoption would undoubtedly have an immense influence for good upon the trade and prosperity of this and other countries, and would alike benefit employer and employed.

Perhaps I may be allowed to say that I write not as a theorist, but as one who has had a practical acquaintance with many phases of industrial life, as workman, manager, and employer of labour. I have thus had many opportunities of gaining a personal knowledge of the conditions of production, and the essentials of industrial and commercial prosperity. These opportunities have been supplemented somewhat by the additional experiences which have accrued through my having held for many years offices of public trust, including that of a member of the Manchester City Council for the last seven years.

In the chapters dealing with the ratio

the present market rate of silver to gold has been assumed to be about 31 to 1. While the book has been going through the press there has, however, been a further fall in the gold price of silver. This may only be a temporary circumstance, but in any case the argument is not affected thereby.

The recent heavy fall in the gold price of silver is really another powerful argument for the adoption of International Bimetallism. It cannot be reasonably assumed that the further great divergence between the two metals which has taken place so suddenly has been due to purely natural causes. The action of Japan in deciding to change from a silver standard to a gold standard has had no little influence. And there can be no doubt that certain associations and persons whose object and interest it is to exclude silver and exalt gold are operating in order to defeat the aims of the American mission which is now in Europe trying to bring about an International agreement. International Bimetallism would

enable us to get rid of such sinister influences, and would help us to build a superstructure of trade and commerce on a firm basis.

W. T. ROTHWELL.

MANCHESTER,

3rd September, 1897.

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BIMETALLISM EXPLAINED

CHAPTER I.

THE SCOPE AND MEANING OF BIMETALLISM.

THE excuse generally given for not accord-
ing a serious consideration to the subject of
Bimetallism is that the questions involved
are thought to be so difficult and complex
that only specialists can hope to arrive at
any sound conclusions in regard to them.
There is a very simple distinction which we
sometimes fail to grasp, and that is the
distinction between the more general and
obvious cases of the operation of a principle
or law, and those cases which are of an
exceptionally complex and subtle character.
For example, the general application of the
law of gravitation is so easy of comprehension

as to be taught in our elementary schools. And yet some of the problems connected with this law are so abstruse as to tax the powers of our greatest mathematicians. But who would suggest that the subject should be ignored on this account ?

So it is with bimetallism. Its main principles are neither hard to understand nor difficult to explain. But popular attention is turned too much towards the more intricate problems raised in regard to certain special interests, and towards effects which are of a remote or of a very partial character. A moderate amount of time and thought devoted to the subject will, however, suffice to put us in possession of the main principles involved. For the question of bimetallism is intensely practical. There is hardly an individual whose interests, both economic and social, it does not more or less affect, and in many cases to a far greater extent than he or she suspects.

There is a vague impression that bimetal-
lism merely means that twenty shillings

Bimetal-
lism a
question
for every-
body.

shall always be equal to one sovereign, and a sovereign always equal to twenty shillings. If this were all, bimetallism would be a simple matter. But such a statement barely touches the real point at issue. In the United Kingdom, as things are, gold is the only true money metal. For our shilling is nothing but a token coin, representing one-twentieth part of a sovereign or pound, and is only coined in silver because a piece of gold of that value would be inconveniently small. The case would be the same with a piece of silver of the value of a penny. A shilling is simply and solely a convenient representative of the twentieth part of a pound sterling, just as a penny is a convenient representative of the two-hundred-and-fortieth part of a pound sterling. When our pound sterling was first instituted it was, and for a long time continued to be, one pound of silver by weight. Our penny, moreover, was originally formed out of silver of such a weight that 240 pennies were equal to one pound. At the present

Gold at present the only true money metal in the United Kingdom.

time not only are these conditions altered, but there is the further complication that neither the silver in any of our silver coins nor the copper in any of our copper coins is worth as much in the condition of raw material as it is in the form of coins. So far as regards silver this is a very undesirable state of affairs.

Bimetal-
lism a
monetary
system
with two
full legal
tender
metals.

The word "bimetallism" is formed on the same lines as the words biped and bicycle. A biped is an animal with two feet, and a bicycle a machine with two wheels. Bimetallism is a monetary system with two full legal tender metals. And as the two wheels in a bicycle are brought together to form one machine, so do bimetallists want to bring together the two metals, silver and gold, to form one money. In order to do this it is proposed to fix upon a certain weight of silver and upon another certain weight of gold, and to determine that these two shall always be equal in value. Each of these weights is then to be taken on an equal footing as

a unit of value. In other words, bimetallism means a constant ratio of value between gold and silver for the purpose of money, brought about by gratuitous and unlimited coinage of the two metals, and by making the coins of either metal legal tender to any amount. Thus in our dealings with one another where money is concerned we should be able to use coins, or units, of either metal indifferently.

CHAPTER II.

REASONABLENESS OF FIXING A RATIO.

No rule
without an
exception.

AT the very outset we are met by an objection which to many people seems insuperable. It is urged that if bimetallism implies that the value of one metal shall be fixed in relation to the other, the fact that the attainment of such a fixity seems to run counter to the whole course of ordinary experience, must, on the face of it, discredit any scheme proposed to be built on such a foundation. For how, it is asked, can we permanently fix the value between gold and silver any more than between carrots and onions, or between iron and cotton, or between any other two things? In fact, it is declared to be as impossible to fix permanently the price of silver in terms

of gold as to fix permanently the price of anything else in terms of that metal. Indeed it is asserted that historical evidence can be adduced to show that the numerous attempts in the direction of any fixing of prices have one and all proved ludicrous failures.

It is just on this point that so many people fail to grasp the full conditions of the issue raised. It is an old saying that there is no rule without an exception. No doubt in itself the act of fixing a relation between the value of gold and the value of silver is an exception, inasmuch as we do not attempt to fix by law a relation between any other two commodities. Still it can be shown that it is a very rational exception. Moreover, so far is bimetallism from being inconsistent with general laws, whether natural or economic, that it strikingly illustrates the operations of several of these laws in directions which, though frequently overlooked, are yet most important.

Money a
unique
thing with
a unique
function.

One of the peculiarities connected with gold or silver money is that it is looked upon by many people as merely a raw material. It is argued in all seriousness that the making of money does not imply a real use of gold and silver; that coins are simply nothing more than the metal weighed up into certain definite quantities ready for sale as sugar often is in grocers' shops; and that gold and silver are only in use when employed in the arts and crafts. Those who reason thus might well ask themselves whether they believe that all the gold and all the silver which are in existence in the form of money would have been produced from the mines, and would now be in stock ready for sale for use in the arts and crafts, if something else were used for money instead of these metals. The fact of the matter is that metallic money is not a raw material, but a human contrivance or instrument formed out of a raw material for the performance of a unique function. And so far as gold or silver is appropriated for

money, so far there is a distinct demand upon, and a use for, the raw material. Gold, when in the form of bullion, although it has undergone some process of artificial transformation, may still be regarded as a raw material. In the form of bullion it is merely ready to be used in any of the various specific ways for which it may be wanted. In this respect it is on the same footing as pig iron or pig lead. Before gold can be money it must either be converted into coins or be deposited in the bank and represented by notes which can enter into circulation in place of coins.

Gold money, therefore, cannot in strictness be called raw material any more than can a gold ring or watch-chain. The difference between raw-material-gold and a watch-chain is perhaps more obvious than the difference between raw-material-gold and gold money. The principle is, however, the same. For in each case a certain quantity of gold is appropriated for the time being for a distinct purpose, and, therefore, the

Distinction
between
money and
the money
metals.

quantity of the raw material is diminished by the quantity so appropriated. On the other hand, if we take any of that gold which happens to be in the form of money and apply it to some other purpose, then so long as that particular gold is fulfilling that other purpose it is not doing the monetary work—it is not acting as a pricing instrument or as a measure of value. It is, therefore, not truly money. In the same way, when we appropriate a quantity of brass for the purpose of brass weights, we diminish the quantity of the raw material to that extent. And so long as the brass is fulfilling this particular purpose it cannot be at the same time fulfilling any other purpose. On the other hand, if we take the brass which is in the form of weights and apply it to some other purpose, then so long as that particular quantity of brass is fulfilling that other purpose it cannot be fulfilling the true function of weights. The distinction between gold and gold money is further seen in the fact that all the gold which is above ground is not in use

in the form of money. In short, so long as there is any gold which is not appropriated for money so long will there be a distinction between gold and gold money. Similar arguments can, of course, be used to show the distinction between silver and silver money.

The distinction between money and the money metals is further, and most conclusively, made clear by the fact that the aid of the Legislature is required to make the metals into money. Gold is gold everywhere, but it is not money everywhere. So it is with silver. Let money be formed of any material whatever—whether of gold, or silver, or paper, or anything else—that material, before it can become legal tender money, must be given a statutory authority which endows it with an exceptional property or power. The power of the law is particularly manifest in the case of our token silver and copper coinage, inasmuch as by virtue of this power the coins readily pass current at a much higher value than their value as metals. The monetary

Money exists solely by human convention.

power thus exists solely by human convention. We see, then, that the commodities gold and silver are natural products out of which men fashion numberless instruments, and that money is only one of these instruments, though it is the most useful and most important of them all.

Money the instrument of demand and the thing most commonly in demand.

It is on such grounds that money has been called "the instrument of instruments." It is the common instrument of demand employed by everybody, high and low, rich and poor; the instrument by the use of which we can provide ourselves with almost everything, and which we can use as a passport to almost everywhere. And by virtue of its being the common instrument of demand, it further becomes the thing which is most commonly in demand.

When it is thus remembered that money is something out of the ordinary run of things—that it is, in fact, a unique thing—we shall be prepared to find that it is a serious mistake to regard gold and silver, when required to serve the purpose of money,

from the same standpoint as carrots and onions, or iron and cotton, or any other two materials or commodities which are not required to serve any one overwhelmingly important purpose common to both.

There are, however, some people who, while agreeing that it is unfair and illogical to draw a parallel between money and other things, still fail to see that, because gold and silver are used in a unique manner for the same purpose, it becomes possible to fix and maintain their relative values. For instance, it is said that although we use cotton for some purposes for which we also use wool we should not, therefore, think of trying to fix permanently the relative values of cotton and wool. But it is obvious that cotton and wool cannot be used for any common purpose to anything like the same extent that gold and silver are used for the common purpose of money. And it may here be remarked that the nearer any two commodities, such as cotton and wool, approach to the position occupied

Relative values of commodities suitable for a given purpose determined ultimately by utility.

by gold and silver in regard to mutual interchangeability for the fulfilment of any one purpose the nearer will they come to maintaining a certain fixity of relative value. For, if they could be used with perfect indifference to satisfy some very general want, then the price asked for the two materials respectively would have very much to do with our decision as to which of them we should buy to satisfy that want. If the price asked for cotton should increase, and wool could be readily used in place of it, probably most of us would materially diminish, if we did not altogether discontinue, our purchase of cotton, and buy wool instead. Consequently, if this purpose should happen to be one for which a very large proportion of the supply of cotton and wool were used, as is the case with gold and silver for money, the ratio of value between cotton and wool would be held fairly steady by the alternating demand for them which would result. This line of argument is dealt with more fully in the succeeding pages.

CHAPTER III.

THE PRINCIPLE OF SUBSTITUTION.

THE favourite argument against the proposal of a Fixed Ratio, and at the same time the most plausible one, is that cost of production will always settle the values of the metals. For cost of production is held by many to be the main factor in determining relative values. And yet a close investigation of the case of the two money metals—and of many other cases, for that matter—will show that this opinion requires considerable modification if it is to be in accordance with actual facts. For when any two or more things can be very readily substituted for one another the cost of their production is far from being the chief factor in determining their value in the market.

Bearing of
cost of
production
on value.

Quite apart from their cost of production, their market value will be largely influenced by the values of the other things which can be conveniently used as substitutes. Cost of production in most cases, so far from determining value, serves only to decide whether the goods shall be produced or not. If it were the chief factor in determining relative values then producers would be in a position to produce any quantity of anything in their line and to sell it at their own price. Cotton, for instance, might be grown in hothouses in this country. But who would say that the market value of the product would be determined by the cost of producing it? The moment it is admitted that the value of an article produced in one place will affect the value of a similar article produced at a greater cost in another place, the principle of the establishment of a ratio of value irrespective of cost of production is also necessarily admitted.

Let us look for a moment more carefully into this principle of the substitution of one

thing for another and its effect on value. It is argued that we should never think of trying to fix a relation between the values of cotton and wool. That may be so ; but there are things which can be substituted for one another, in the fulfilment of one and the same purpose, much more perfectly than cotton and wool. Let us, with Jevons, rather take beef and mutton as an example. Is it not a fact that the value of beef has much to do with determining the value of mutton, and that the value of mutton has much to do with determining the value of beef ? And do not these two meat substances influence each other in regard to their respective values to a far greater extent than either of them affects the value of, say, iron, or cotton, or any of those other things which are used for purposes totally distinct from that of meat ? The question may perhaps be asked—Does not the value of beef and mutton have some effect on the value of many other things, and particularly on that of the various food stuffs ? This is no doubt true.

Things which can be substituted for one another affect each other's value.

But the influence of beef and mutton on the value of other commodities is more directly operative in the case of those commodities which are food stuffs, for the simple reason that they are themselves used for food. And, further, those food stuffs which come nearest to taking the place of beef and mutton will be the most sensitive to any change in the values of beef and mutton. By following up this line of inquiry we see how natural, and indeed inevitable, it is that beef and mutton should have so direct an effect on each other's value, for they are practically substitutes the one for the other.

Cost of
production
not the
chief
factor in
deter-
mining
value.

Clear as these considerations appear to be, they may yet not suffice to overthrow the deeply rooted idea that cost of production is always the ruling factor in settling the value of things. While fully granting the immense importance of this factor, there are many grounds to justify us in denying that the cost of production occupies the commanding position too generally ascribed to it. There is, for example, the influence exerted

by the various qualities of the same kind of goods in determining the value of one quality in relation to any of the other qualities. It is common knowledge that the prices of the respective grades or qualities of the same kind of goods are determined not so much by their relative cost of production as by their relative fitness to satisfy a want or fulfil a purpose. And it is on this basis of relative fitness that goods of the same kind and the same quality, in the same market, are assessed at the same price, irrespective of the cost of producing them and of bringing them to the market.

We may therefore generalise the principle of substitution thus :—When different things can be conveniently used for what is practically the same purpose—that is to say, for fulfilling what is to all intents the same want—they may be regarded as if they were different qualities of the same kind of material so far as that particular purpose is concerned. And we may apply this principle to the matter more immediately

Different things suitable for a given purpose may be regarded as different qualities of one thing.

Gold and silver two qualities of the monetary material.

in hand by drawing the natural inference that gold and silver, when intended to be used for the purpose of money, may be taken as two qualities of one kind of material — the monetary material. And it is worthy of note that in the case of gold and silver we have not to deal with varieties or qualities of one and the same substance. There is but one quality of pure gold and one quality of pure silver. It thus becomes comparatively easy to substitute either of these metals for the other in fulfilling the purpose of money. The mutual interchange of the two metals is in fact more simple and direct than is the case with any other two commodities. Bimetallism is thus seen to involve no complication in the free and natural working of the principle of substitution.

CHAPTER IV.

DEMAND A STRONGER FACTOR THAN SUPPLY IN DETERMINING VALUE.

THE theory that cost of production is the main factor in determining value seems to arise from an assumption that an essential factor must also be the chief factor. But it by no means follows that to be the former is also to be the latter. For example, the services of a compositor are necessary for the production of a newspaper, but such services are about the last factor in determining either its success or its price. We may possibly overlook the fact that economic demand in itself, as distinct from mere desire, involves labour or expense. It will be admitted that demand generally implies the amount of money we are disposed to part

An essential factor not necessarily the chief factor.

Demand itself involves labour.

with in exchange for the thing we want. But in the acquisition of this money labour and expense are involved. And, when regarded strictly, money is itself found to be but a particular kind of supply. We see, then, that in an exchange between two people, when money is parted with in exchange for something else, there are really two supplies and two demands. Each person supplies what he is offering for exchange, and each person demands what he is desirous of obtaining in exchange. And thus every exchange is a case of two buyings and two sellings, because each person sells that which he parts with and buys that which he gets in exchange. It is therefore evident that, although we are in the habit of saying that value is determined by supply and demand, we should be more strictly correct if we were to say that the value of things is determined not only by the supply of the things themselves, but also by the supply of those other things which are offered in exchange for them.

Two supplies and two demands in every exchange.

We virtually, therefore, mean that value is determined by two supplies. And it necessarily follows that, in considering the question of the cost of production in its relation to value, we must consider not only the cost of producing the thing which we offer in exchange, but we must also consider the cost of producing those other things which we are desirous of obtaining in exchange. For instance, if the value of a hat is a sovereign, then—even if, for the sake of argument, we grant for a moment that the source of value could be traced to cost of production—the value of the hat in terms of sovereigns would be due to the cost of producing a sovereign as well as to the cost of producing the hat itself. And, on the other hand, the value of the sovereign in terms of hats would be due to the cost of producing the hat as well as to the cost of producing the sovereign itself. In short, since a thing cannot measure its own value, but must be measured by comparison with other things, it is clear that we cannot

A thing cannot measure its own value, nor can its value be measured by its own cost of production.

determine its value by comparing it with its own cost of production.

The factor of demand invariably associated with money.

The factor of supply and the factor of demand may nevertheless be held by some people to exercise an equal influence in determining the value of anything. But when we come face to face with the fact that in our dealings with one another we invariably associate demand with the money and supply with the thing obtained in exchange for money, we have a clear indication afforded as to which of these two factors may be considered the more important. It simply comes to this. In producing for the market, or in supplying our personal services direct to other people, it is our first object to obtain money. And money is demanded simply and solely as a means by which other things may be demanded. Demand, therefore, is seen to be the ruling factor throughout.

Demand the cause of supply.

The argument that supply very often creates and stimulates demand does not affect the position that demand is the

originating cause of supply, and that demand therefore takes the lead. There is no doubt that we buy many things for which we should have had no desire and for which we should have had no demand had they not been specially brought to our notice. But we must not overlook the originating cause of that supply, namely, the demand for money on the part of those who produce and supply those goods which happen to have tempted the purchaser. In short, demand either for the money itself—the instrument of demand—or for all those other things which are to be had by means of that instrument, is without doubt the generating cause of supply. Seeing, therefore, that people in their industrial operations are trying to get money—or, rather, that they are trying to part with an endless variety of goods and services in exchange for money—we naturally infer that those who have goods or services to offer in exchange occupy a rather inferior, or at any rate less masterful, position than those who have the money.

And this conclusion is amply confirmed by the practical experience of daily life. Money is really the master of the position, and money is the concrete embodiment of demand, being, indeed, potential demand. Since, therefore, money is the recognised instrument of demand, and since supply is represented by the commodity offered in exchange for money, it follows that the demander—the owner of the money—is in a stronger position than the supplier of the commodity. That is to say, demand is more powerful than supply in determining market value.

Influence
of the
quantity
already in
supply on
the value
of fresh
supplies.

There are two considerations in connection with the “cost of production” theory which should by no means be overlooked. The first and most important is the influence exercised by the quantity already in supply in determining the value of the fresh supplies. This consideration applies with special force to gold and silver money. Even supposing—as is, of course, by no means the case—that the whole annual yield of gold and silver were used for the purpose of money, this

annual yield is still very small when compared with the enormous quantity of these metals which has been appropriated for the monetary use, and which is now actually in circulation in the form of coins or is held in reserve, in the form of bullion, for the purpose of meeting or redeeming paper notes. Even granting that the cost of production may have much to do with determining the value of goods which are perishable, or which cannot be kept for more than a year or two at the most, and for our supply, of which we have, therefore, to depend upon the annual harvests, it is quite obvious that these conditions do not apply to the money metals. The quantity of gold and silver annually appropriated for money is less than one per cent. of the quantity of money already in supply. Consequently, were the "harvests" of gold and silver to fail absolutely for many years to come, though the value of money would increase, there would be no money famine. And clearly, in such a case, its value—that is to

say, its general purchasing power—could not be determined by the cost of the production of new supplies, since under the supposed condition there would be none. It would be determined by the demand on the existing stock, as is the case with goods in connection with the production of which there happens to be a cessation, say, in consequence of a strike or a famine. It is so in every department of trade. We know that large stocks of any kind of goods have a great effect on the market value of the new productions. How much greater, then, must be the effect of the enormous quantity of money which is already in stock on the value of the new supplies of money ! Moreover, as this enormous quantity of money is constantly increased by the additions made to it from year to year, the new supplies, unless they are very largely increased, will affect its value with a constantly diminishing force. It is almost an impossibility that the new supplies of the future will ever affect the value of the stock to anything like the extent

that the new supplies affected the value of the stock in the 'fifties and 'sixties.

The second consideration to which attention should be given is the influence of legislation on the demand for the money metals. The respective trading countries of the world have, as a fact, adopted one of the two monetary standards to the exclusion of the other. Therefore changes from one standard to the other are always possible. This has been abundantly proved in Europe during the last twenty-five years, and latterly we have had the case of Japan. Tamperings with the existing currency are also always possible, of which we had a strange example in India in 1893. There is thus a serious liability to large fluctuations in the demand for each of the money metals.

The demand for the money metals determined by currency legislation.

From these various points of view we are inevitably brought to the conclusion that it is not the quantity of the new supply, nor the cost of the production of the new supply, which is the chief factor in determining the value of gold and silver, but that the more

powerful factor is that of the demand for these metals in the form of money. And we have seen that the demand for money is stronger and more general than the demand for any other thing.

CHAPTER V.

THE COURSE OF LEAST RESISTANCE.

LET us go to the very root of the matter, and see what that is which in its turn governs the factor of demand. It will be agreed that we do not, as a rule, pay, say, sevenpence for something which we know we can get at the same time and place for sixpence, neither do we pay sevenpence for anything if we know that for sixpence we can get another thing which will satisfy our want equally well. So far as we can we try to fulfil our purposes or to satisfy our wants by parting with as little money as possible. There is a great deal of primitive human nature associated with our business and social affairs. We have an inherent tendency to take the course of least resistance in satisfying our wants or

Demand
takes the
course of
least
resistance.

in gratifying our desires. In ancient times, before the institution of money, when people produced for their own consumption, the way in which they pursued this course was by satisfying their wants with the least labour, trouble, or difficulty possible to them. And we pursue the same course nowadays in trying, on the one hand, to get as much money as we can for our wares and services, and, on the other hand, in trying to get as much of other people's wares and services as we can for our money. In short, in buying in the cheapest market and in selling in the dearest we are only, by means of money, pursuing the course of least resistance more efficiently than our ancestors did without it.

These considerations may perhaps seem a little wide of our mark, but they are of use in clearing the way to it. We have to deal with demand on the one hand and with supply on the other. And associated with these two factors there is that all-important force which goes by the name of *motive*. In every exchange there is some motive at

work. As we have seen from the side of supply, our motive in obtaining money is not as an end in itself, but simply and solely as a means to an end. On the other hand, from the side of demand, when money is offered in exchange for something else, our motive, more often than not, is to use that something else in the gratification of some personal want. In other words, more often than not, that something else is desired as an end in itself. Of course, in many cases things are bought with money with a view to altering their form or condition and again exchanging them for money. And, again, many people who buy things with money do so with the object of ultimately obtaining more money in exchange for them without at all altering their form or condition. But these two latter motives may be disregarded in this connection, since they are only steps on the way to that final stage in which the goods come to be demanded or bought by means of money in order that they may be either actually consumed or put to some

demand stronger, more numerous, and more direct than motives associated with supply.

definite use. They do not directly affect the point at issue. For what we seek to bring out here is the fact that the motives associated with the giving of money in exchange for commodities are more numerous and more direct than are the motives associated with the giving of commodities in exchange for money. Indeed, in the latter case it can hardly be said that there is any motive but that of obtaining money ; and inasmuch as in using money we have to part with it we cannot say that the motive in obtaining it is a direct one.

Having regard to these considerations we may rest satisfied that in this matter of the use of the two money metals under bimetallic conditions men will as usual pursue the course of least resistance, and that demand will be stronger than supply in determining their relative values.

CHAPTER VI.

PRINCIPLE OF SUBSTITUTION APPLIED.

IF every particular commodity were needed for one particular purpose only—that is to say, if there were as many particular purposes as there are particular commodities—then the value of each commodity, unless disturbed by large variations in the quantity in stock, might be approximately determined by the cost of its production. But purposes and commodities are not bound together in this direct and simple manner. In fact, it is doubtful whether there is any purpose for the fulfilment of which at least two, and most frequently more, commodities do not offer themselves as alternatives or substitutes in some sense. What is the cause of the endless number of patents, the new devices,

Com-
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grouped
according
to their
utilities.

and the fresh methods of doing work? Is not the dominating motive that of competing with existing materials or methods for the fulfilment of some particular purpose by lessening the expenditure of exertion or by effecting that purpose at a cheaper rate? Now such sets of commodities as can be used for any one particular purpose, and can serve as alternatives or substitutes for one another, must for economic considerations be taken as composing groups by themselves.

The values of the individual members of a group are affected by each and all of the other members.

This being so, it is inevitable that the members of any such group should influence each other in regard to their respective uses and prices. And it may be well to note that there will always be one member which is for the time being the cheapest—the cheapest, that is to say, from the point of view of market price combined with efficiency in fulfilling the purpose common to the group. This cheapest member is also the most important member. It goes far in determining the selling price of its colleagues, and brings into play a factor other than that of the

mere cost of production. For in consequence of the relative fitness of the members for fulfilling the purpose with which the group is concerned, the selling prices of the rest will have to be more or less adjusted to the price of that member which holds the position of the cheapest in the market. That is to say, their respective prices will not be determined solely by their respective costs of production.

It may be asked whether the cost of the production of the cheapest member of the group does not determine its own market price. And since the cheapest affects the price of the others, can it not after all be said that the cost of production, directly or indirectly, is the chief factor in determining price? This objection is easily disposed of. For we have to reckon with the dearest as well as with the cheapest member of the group, and with all the intermediate members as well. The dearest pulls up and the cheapest pulls down. Again, some producers are satisfied with much smaller profits than

Effect on
prices of
the highest
cost of pro-
duction.

others ; and other producers, by some new method, or under circumstances peculiar to themselves, can produce at a much cheaper rate. But do they sell at a much cheaper rate ? Not a bit of it. They may certainly offer their wares at a little lower price than others are disposed to take for similar goods, but it would be nonsense to expect them to reduce the price proportionally to the cost of producing them. Success in business affairs is not as a rule achieved, nor are fortunes, large or small, made by pursuing a line of conduct such as that. On the contrary, people try to get the best price they can ; and other people's higher prices are a help to them. Thus, in consequence of the existence of higher prices in the group, the lowest-priced member is sold at a higher price than would be warranted solely by the cost of producing it.

Economists tell us that prices are determined by those lands, mines, and works which are the least remunerative of those engaged in actual production. This is

equivalent to saying that those concerns in which the cost of producing certain goods is highest determine the cheapest price at which similar goods can be bought. We have here a law which is practically of universal application. For we may be sure that those who are most favourably situated, and who can produce at a much less cost than others, will not merely on that account sell at a much less price. They make all the profit they can, and the higher the price which others are compelled to ask, on account of the higher cost of production in their case, the better it is for those who are producing under more favourable conditions. So that the highest cost of production and the lowest cost are not isolated the one from the other, but influence each other very materially. And therefore the cost of the production of the cheapest does not determine its own market price. The lowest pulls the highest down, and the highest lifts the lowest up. It is clear, therefore, that the price of any one member of a group of commodities used for

a purpose common to all of them is affected, more or less, by the conditions associated with the use and production of all the others. And it does not by any means follow that because a thing costs more to produce its price will, therefore, be more, or that because a thing costs less to produce its price will, therefore, be less.

It may be further objected that the more cheaply produced articles would eventually drive out those which involved a greater cost in their production. It is not denied that such a result does sometimes happen. This objection, however, applies more particularly to those cases where several kinds of commodities can be used for the same purpose, and where one commodity can be produced in sufficient quantity to displace the others entirely. But, as a rule, the difference between the highest-priced and the lowest-priced articles of the group, having regard to their respective utilities for the purpose, is not so great as to enable the lowest-priced article to drive the others altogether

Neither of two commodities used for any common purpose can drive the other out.

out of the field. We have to reckon with the fact that any additional demand on the lowest-priced article has a tendency to increase its price. And, on the other hand, the falling off in the demand for the higher-priced articles will have a tendency to reduce their prices, and hence to stimulate the demand for them. There is thus at once a compensating movement among the commodities themselves, and a compensating action as regards the purpose fulfilled by them.

Take the case of cotton and wool. Though these materials cannot be looked upon as interchangeable for any particular purpose to anything like the extent to which gold and silver are interchangeable for the purpose of money, yet, if the relation between the price of cotton and the price of wool were fixed, is it likely that one of these materials would ever drive the other out? Or, to take a more pertinent illustration, were we to determine that the price of mutton should be absolutely constant in

relation to that of beef, can it be supposed that, in such a case, one of these meat substances would ever entirely and permanently displace the other? Consequently, when there are only two commodities which are used for any one purpose, and when, as is the case with the two commodities gold and silver for money, that purpose is a very common one, it is extremely improbable, if not impossible, that one of the commodities would ever drive the other out. For, in order to do so, the demand upon one of them and the supply of that one would have to increase to such an enormous extent before the demand for the other and the supply of it could become extinct, that, having regard to the compensating influences just named, it is almost beyond the bounds of possibility for such a condition of things to come to pass.

We have still to meet the objection that although the price of one commodity may influence the price of another or of a few others, yet relative prices vary almost from

day to day. It goes without saying that as between any one commodity and many others there are variations continually taking place. But in some cases these variations are not so great as may possibly be thought. Indeed, in a few instances we may say that the relative price is practically fixed. Take the case of beef and mutton to which we have just alluded. The prices of these commodities do indeed frequently alter. But the relation between their prices, though not absolutely unvarying, may still for all practical purposes be considered as constant. It may fairly be said that the price of beef and the price of mutton rise and fall together, and that the ratio between them is approximately determined by their fitness to serve as substitutes the one for the other.

Some relative prices practically fixed.

As regards what we may call raw materials, beef and mutton perhaps afford the best illustration. But, as regards various other things, there are many instances where the relative prices remain unchanged for long periods. Take the relative prices for the

different classes in railway travelling. Take also the relative prices for the several classes of seats in theatres and for the standard newspapers.

We shall not be wrong, therefore, in holding that the nearer raw materials approach to one another in their fitness for some particular purpose the less will their prices diverge. And the case is the same with artificial products. The nearer they can be made to approach one another in regard to their utility for fulfilling some purpose common to both, the less likely are they to vary in the relation between their prices.

Gold and
silver
equally
fitted for
money.

Now, gold and silver are so nearly identical in their fitness for the purpose of money that they may be looked upon as practically perfect mutual substitutes. They always have run, and they still do run, together as a natural pair in fulfilling this purpose. So much is this the case that it would seem to be part of the order of the world. Even in our own country, which is avowedly gold monometallic in its currency, we have

also to coin silver in large quantities. It is true that this silver coinage now works on a fictitious basis, and that it is reduced to the rank of token money. But in spite of this, and in spite of the fact that a certain value in silver is between fourteen and fifteen times the weight of the same value in gold, there are very few people who would be willing to give anything to their creditors as an inducement to pay a small account in gold rather than in silver.

The principle of substitution is thus seen to apply in all its fulness in the case of the two money metals under bimetallic conditions. And we are, therefore, justified in holding that the compensating action which that principle entails will render a fixity of relation in the values of gold and silver a certainty.

CHAPTER VII.

INFLUENCE OF THE MONETARY USE OF THE METALS ON THEIR USE IN THE ARTS AND CRAFTS.

WERE all the gold and all the silver used for no other purpose than that of money, many people would have less difficulty in seeing that a fixity of relation between these two metals may be permanently maintained. But as there is a very great demand upon both metals for other purposes, and as it is argued that this demand is sure to interfere with the permanency of any ratio that may be determined upon, this aspect of the matter must be dealt with. We must inquire whether the demand upon the metals for these other purposes is, or is not, connected with the demand upon them for the monetary purpose.

A close connection between the monetary use of gold and silver and their other uses.

Obvious considerations would at once make us decide that they are connected. But merely to allow this is not to realise the strong nature of the tie which unites them. For it can be shown that there is not merely a very close connection between the monetary use and the other uses of the two metals, but that it is one which, under bimetallic conditions, would have much to do with the maintenance of a ratio between them.

We fully recognise the fact that the market values of gold goods and of silver goods are assessed in terms of money, and that these goods themselves are, like other goods, bought with, and sold for, gold and silver money. They are, therefore, in these respects in a similar position to other commodities. But it must not be argued from this that the connection between money and goods made of the monetary metals is not closer than that between money and goods made of other materials. To do so would be to overlook a most significant factor, namely, that the metal in gold and silver

Gold and
silver
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goods, unlike the materials of other goods, can be readily transformed into money. The same piece of metal may be at one time in the form of money and at another time in that of a ring, or a watch-chain, or any other form. In the one case it is actual money and in the other cases it is potential money. For the ring and the watch-chain can be readily melted down and transformed into money, and *vice versâ*. There can thus be no strongly marked dividing line, so far as value is concerned, between the gold and silver of which money is formed and the gold and silver of which many other things are formed. And for this reason there can be little doubt that the use of these metals for money has largely influenced, and so long as they continue to be used for money will always influence, their use in the arts and crafts.

It has been frequently pointed out that in India, for example, ornaments formed out of the two precious metals are so closely allied with money as to be looked upon as a reserve

of monetary wealth. And it is also common knowledge that in our own country gold and silver plate and ornaments have been, and even now are, regarded in a like manner. But the moment either silver or gold ceases to be standard money the metal concerned is placed on a level with other commodities, and, like them, is liable to become a drug in the market.

The writer recently asked a gold and silver smith in a large way of business whether the demand for silver goods, now that silver did not rank equally with gold as standard money in Europe, was as strong as it used to be, and whether people bought silver articles as compared with gold articles as freely as they did when silver was dearer. He acknowledged that for some reason or other silver was not so highly esteemed, and that the demand for silver goods as compared with gold goods was not so strong as it was some years ago. Now the general, if not the universal, rule with other commodities is that the lower the price the greater is the

demand. Here the reverse is the case. And the exception is noteworthy inasmuch as it has to do with that monetary metal which has been dethroned from its monetary position. Consequently, it is fair to surmise that if silver were again given full power as money, and if, when need should arise, silver goods could be melted down and taken to the Mint, fashion would again follow the law, and we should see this metal restored to its former dignity in the arts. In any case there can be no doubt that the use of these two metals in the arts and crafts is, and will continue to be, largely affected by the esteem in which they are held for the monetary use.

Let us try to realise more adequately the remarkable and commanding influence exerted by the monetary use. Let us suppose, for the sake of argument, that so large a quantity of the precious metals could be appropriated for non-monetary purposes as to leave only a very small quantity for money. In that case money would be extremely scarce, and would be very dear as measured by general com-

modities. This condition would, obviously, react in such a manner as to cause a large quantity of the gold and silver then in use for other purposes to be transformed into money. For, under such circumstances, a less number of people would be able to hoard, or to retain in their possession, the articles formed out of these metals.

This conclusion is in no wise antagonistic to the fact that the use of these metals for other purposes was the original cause of their being adopted for money, as is plainly shown by history. For while it is certain that previous to their use for money the metals were used in the construction of objects of adoration, and in various forms of barbaric display, we have to remember that the conditions prevailing at the time of the adoption of any course of action will by no means necessarily remain the same when once that course has been adopted. There may be an entire change in the circumstances. It has been so in the case of gold and silver. The monetary use of the

The selection of gold and silver for money causes the metals to be more highly esteemed for other purposes.

metals, which in its infancy was weak, has waxed into a giant. It has now reacted in such a way as to cause them to be far more highly esteemed than they otherwise would be, and has further greatly strengthened the demand for them for other purposes. The case is somewhat analogous to that of a man who is known to possess certain estimable qualities and characteristics, and who is on this account selected by the community to fill some position of trust and responsibility. The selection of this individual for the special functions which he may be called upon to perform, and the skill and ability with which he may perform them, will weigh most powerfully with his fellow-citizens in turning their thoughts to him when other offices have to be filled or other functions performed.

The monetary use of gold and silver the predominating factor in determining their value.

Since, then, the influence of the use of the precious metals for money is so marked and powerful in causing them to be more largely employed for other purposes, we may safely regard the monetary use as the predominating

factor in determining the value of these metals for use in other forms. Consequently, there can hardly be any doubt that the maintenance of a ratio between gold and silver for the purpose of money will of itself naturally maintain the same ratio between the two metals for all other purposes.

CHAPTER VIII.

INFLUENCE OF THE MONETARY USE ON THE PRODUCTION OF THE METALS.

The monetary use of gold and silver greatly stimulates their production.

ALTHOUGH a considerable quantity of gold and silver might be produced even if they were not used for money and if something else were used in their stead, yet it cannot be denied that their adoption for the monetary use is responsible for much of the special and prevailing incitement to search for them and to mine them. This monetary use is also in a large measure responsible for the highly speculative and gambling spirit associated with their production. The money metals when produced are potential money. They can be readily minted, and so become full legal tender, or they can be readily exchanged for money, either actual coins

or bank notes, without cost to the producers. These metals are thus placed in a peculiar and exceptional position. Indeed we have here a state of things in regard to which the common rules regulating production in other industries would not seem to apply, and in reference to which it may be said that the cost of production is not of much force when compared with the other inciting factors. There is, in fact, an unlimited demand for the standard money metals in any country at a certain fixed price in the money of that country. This unique feature of an unlimited demand adds a fascination to the search for gold and silver which it would not possess if the miners of these metals had to take their chance of selling or exchanging them for money, as the producers of other kinds of goods have to do. Thus, being satisfied that the monetary use mainly influences, and in fact determines, the fresh supplies of gold and silver, we are once more forced to the conclusion (Chap. VII.) that

the establishment and maintenance of a ratio between them for monetary purposes will necessarily establish and maintain the same ratio between them for all other purposes.

CHAPTER IX.

INFLUENCE OF THE EXCHANGE FUNCTION OF MONEY ON LOANS AND HOARDS.

Two questions of some importance may here Loans. be briefly mentioned. The first has reference to loans. The monetary function of the precious metals is of vital force in regard to loans. For it is by virtue of its use as the means of exchange that money is more generally accepted as a loanable thing than anything else. Were it possible to deprive money of its "medium of exchange" function in general, and its "legal tender" function in particular, then the metals remaining after demonetisation would almost cease to be loanable articles. Now the loan system is enormous in its extent, and far-reaching in its effect on modern

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commerce. It thus exercises a great additional influence on the demand for the money metals, and, consequently, on their value.

Hoards.

The use of the metals for money also exercises no little influence in regard to hoarding. There cannot be the least doubt that the hoarding of gold and silver, not only in the form of coins, but even in the form of bullion, is stimulated as a consequence of that function which can be conferred by the legislature only, namely, the function of legal tender. It is this function which makes these metals the most exchangeable form in which wealth can be stored for use in time of need.

CHAPTER X.

MINT PRICE DETERMINES MARKET PRICE.

IN order to avoid any confusion of ideas it may be well to point out that by the term "mint price" we mean that the price of gold at the English Mint is £3 17s. 10½*d.* an ounce. This does not, however, convey precisely the idea of what takes place when a man disposes of his uncoined metal through the Mint authorities. In reality, if we neglect the alloy, he simply gets such a number of coins as will contain an equal weight of gold to that which he brings. Thus the process at the Mint, so far as it concerns the owners of bullion, is simply that of making up the metal in the form of coins on their behalf without practically any charge for the labour incurred. But

Meaning
of mint
price.

the way in which this conversion is actually brought about is through the instrumentality of the Bank of England. The Bank will take uncoined gold, and will give in return the same weight of gold in coins, or bank notes to the same value. And the only charge which the Bank makes for taking on itself the trouble of conveying the metal to the Mint, and waiting until it is coined, is the small sum of $1\frac{1}{2}d.$ an ounce. The net result is that the Bank will always give £3 17s. 9d. in lawful money for each ounce of gold. And if silver were made lawful money on the same basis as gold, and were thus put on a par with gold at some fixed ratio between them, then the Mint and the Bank of England would treat with the owners of silver on a basis similar to that on which they now treat with the owners of gold. For example, if the price of silver were fixed, for the sake of illustration, at 16 ounces of silver to 1 ounce of gold, then the Bank would always give £3 17s. $10\frac{1}{2}d.$

(less its commission) for 16 ounces of silver, or about 4s. 10½*d.* per ounce. The process is simply one which, at the expense of the State, turns the metal brought to the Mint into money; the system being known as "Open Mints with Free Coinage."

The way is now clear for the consideration of an objection to bimetallism which is frequently met with. There are some people who strongly contend that if a certain number of ounces of silver were considered equal to one ounce of gold for the purpose of money there would be two prices for the metals—one price for money and another for other purposes. In other words, they hold that there would be a market price and a mint price.

When discussing the subject of money we are apt to fix our minds upon coins. Coined money is not, however, indispensable to any monetary system. At the same time, for the ordinary purposes of retail trade, it is the most convenient and satisfactory form of money which has hitherto

Coined money not indispensable to any monetary system.

been devised. Although the exigencies of modern commerce in its higher developments have acted as incentives to the introduction of additional forms of money, yet the broad and undeniable fact remains that the principle at work is the same whatever form the money may take; whether it be in the form of bullion lying in a bank and represented by notes in circulation, or whether it be actually circulating in the form of coins. For the root principle of our monetary system is that a given weight of the metal is taken to be a unit measure of value. And therefore there is no difference in principle between 100 sovereigns in circulation and a £100 Bank of England note in circulation, when against this note there is held in reserve in the cellars of the Bank a quantity of gold equal in weight to that of the gold in 100 sovereigns. Thus, for all practical purposes, in discussing money, or at any rate metallic money, we can treat it as if it were all in the form of coins.

With this preliminary, let us now deal with the contention that under a fixed ratio the metals would have two prices. It has already been proved that a considerable influence is exerted by the monetary use of gold and silver upon their production and upon their use in the arts and crafts. It is plain that our conclusions on these points have a direct bearing on the question of mint price and market price. For if the monetary use of the metals influences their other uses to the extent described (Chap. VII.), it will exert an equally powerful influence upon the prices of the metals at the Mint and in the market respectively, which will necessarily draw them together.

But there is another aspect of the question in which we can more clearly see that the mint price would itself really be the market price. At the present time the gold in a new coin and the same weight of uncoined gold are always of equal value at the Mint. For bullion can be coined into sovereigns without cost to the owner, and sovereigns can be melted into

The metal
in the
form of
coins has
some
advantage
over the
uncoined
metal.

bullion. But for actual circulation the coin has some little advantage over the uncoined metal, inasmuch as coins are not only serviceable for circulation, but are readily available for being melted down for other purposes. On the other hand, whilst the uncoined metal is as effective for use in the arts and crafts as that which is coined, it is not as effective as coins for the greater part of the work of money. Another way of describing the advantage is to say that the metal when in the form of coin is slightly more valuable than when in the uncoined state. The reason is plain. The Mint has performed a useful service for the people in weighing and stamping the metal in the form of coin, which service, though not paid for directly by each individual who obtains new coins from the Mint or from the Bank of England, is yet an expense to the State, and must be paid for through the taxes. The indirect effect of this is to make the Mint, or its representative the Bank of England, the best market to which the owners of bullion can take their

The Mint
the best
market for
the money
metals.

metal. Now those who have anything to sell may be trusted to take it to the best market within their knowledge. And, of course, the best market for sellers determines the market price. Consequently, the mint price is really the market price. Thus far the reasoning has been in regard to gold alone, but under bimetallism the very same principle would also be in active operation in connection with silver. As it is with gold so is it with silver whenever and wherever silver has a free and open mint and is legal tender in unlimited amounts.

Let us look at the matter from a slightly different standpoint. The price of a commodity is, as everyone knows, the quantity of money for which it will exchange; in other words, the price of a commodity is the lowest that the seller will take and the highest that the buyer will give at any particular time. Now the mint price is certainly the lowest at which the owner, either of gold or silver, will sell his metal—the lowest at which he will exchange it for legal tender. Though

he would no doubt sell it for more if he could, how is he to get more ? The mint price is the highest that a buyer of either silver or gold will give for it. A buyer will not give more coins for a given weight of uncoined gold or silver than would be required to obtain that weight by melting the coins themselves; nor would he part with more bank notes to a bullion dealer for a given weight of the metal than he would have to part with at the Bank of England in order to obtain that same weight. Thus, if the mint price is at once the lowest which the seller will take and the highest which the buyer will give, it necessarily follows that the mint price is the market price.

The value of standard coins not wholly due to the value of the un-minted metal.

While on this phase of the subject it is perhaps advisable to notice a very common misconception. It is said that metallic money does not derive any of its value from the mintage of the metal, but wholly from the unminted metal. This is one of those statements which may be said to be at once both true and untrue. It

certainly should not be made or accepted without qualification. The value of a standard coin and the value of the metal of which it is formed are, without doubt, practically the same. But there is another and a most important side to this question. While, on the one hand, it is true that the value of a standard coin depends on the value of the metal it contains, yet, on the other hand, it is equally true that the value of the precious metals, like the value of other things, depends on the supply and on the demand. And demand implies use. Now, since the demand for gold and silver for the monetary use constitutes a very large proportion, if not, in fact, the largest proportion of the entire demand for them, it must on that account exert a very considerable influence on their value. There is in this way a mutual relation established between the value of the uncoined metal and that which is coined. But inasmuch as the demand for these metals for the monetary use causes them to have a much

higher value than they would have in the absence of such demand, it is rather wide of the mark to say that the value of the coined metal depends simply and solely on the value of the uncoined metal. How large a portion of the total value may be due to the monetary use is immaterial to the argument. That some portion of the total value must be due to this use is beyond dispute if the most ordinary principles of Political Economy are to have any weight at all. The same argument applies to all commodities. Take, for instance, such raw materials as wheat, coal, cotton. These owe their value mainly to the special uses for which they are respectively more fitted than any other competing substances. If wheat were not used for bread, or coal for fuel, or cotton for clothing, the values of these materials would not be what they now are. In like manner, if gold and silver were not used for money the values of these metals would not be what they now are. Consequently, to say that the value of

the minted metal depends upon the value of that which is unminted, is to give expression to what is only half the truth, and that not the more important half. It is, therefore, fallacious and misleading.

CHAPTER XI.

OPEN MINTS AND UNLIMITED DEMAND.

Open
mints
bring
about an
unlimited
demand
for the
money
metals.

AN unlimited demand for the money metal or metals is the inevitable outcome of "Open Mints." It is, however, argued that whatever may be the quantity of money actually in any particular country, or whatever may be the quantity of the money metal or metals on the way to the mints of that country, the effect of foreign competition is such that general prices in that country cannot rise much above the level of prices in other countries. And, therefore, it is said that a time would come when there would not be any call for more money in the country—that is to say, no more money would be required in order to keep prices at the maximum height to which foreign

competition would allow them to rise. Gold or silver, we are told, would then cease to flow into the mints of a country in which such a condition of affairs prevailed. On this ground it is contended that an open mint does not constitute an unlimited demand for the money metals.

We have here a very far-fetched and subtle objection, with which it will be well to deal before going further. Though we are quite correct in saying that the demand at the mints is unlimited, yet it is perhaps not absolutely correct to say that there is no limit to a real necessity for more money. We are not, however, discussing a question of theoretical possibilities, but one of an actually existing demand. In these days it may be said that, with trifling exceptions, the producer of every commodity produces in order to sell—that is, to get money in exchange. If he can sell an unlimited quantity of his produce there must be, in the common acceptation of the meaning of the words, an unlimited demand. Now,

Quantity
of money
limited
only by
conditions
of supply.

with open mints and free mintage, the producers of gold and silver know they can always sell any quantity of their commodities at a fixed price because they can have them turned into money at the mint; or, what comes to the same thing, they can always depend upon getting a certain quantity of legal tender money for a certain weight of their money metal. It is clear, therefore, that, as things are, the quantity of money is not limited by the demand at the mint. In reality it is only a question of supply which is raised by those who put forward such an objection—not one of demand at all. The supply will, of course, be limited by the conditions necessarily attending it. For instance, if the purchasing power of silver money falls—that is to say, if the prices of commodities in general, as measured in silver money, rise, whether in one country or in all—then the stimulus to the production of silver will naturally become weaker, and a decrease in the fresh supplies of the metal may be

expected. This is equally applicable to gold. And thus the statement that an open mint does not constitute an unlimited demand for the metal is not true. It has an appearance of truth only in the sense that it does not and cannot command an unlimited supply.

If it were reasonable to argue that an unlimited supply is necessary to constitute an unlimited demand, then the same argument would apply even were an end put to international trade, and the trade of every country, including the production of the money metals, confined within its own boundaries. For even in that case, though it could still be said that an open mint would constitute an unlimited demand for the money metals, it might be replied that the quantity of money would be limited, because a decrease in its purchasing power would largely influence the fresh supplies of it. On the same grounds it might be said that even if the whole world were conducting its trade and commerce on one monetary basis (no matter whether that basis

were monometallic or bimetallic), and if there were open mints in all nations, the quantity of money would still be limited. But in every case the limit would come, not from the *demand* at the mints, but, as before stated, from the *supply*. In short, whilst it may fairly be held that the quantity of most other things is limited by the demand for them, we find that, owing to the operations of the mints, the money metals, before they actually reach the monetary stage, are in a peculiar position. Unlike other raw materials, they need never be kept on hand or in stock. They are thus limited by the conditions of supply alone.

CHAPTER XII.

BIMETALLISM IN FRANCE.

It is commonly known that France attempted the fixing of a permanent ratio, and that she actually maintained a ratio of $15\frac{1}{2}$ to 1 in operation from 1803 to 1873. But to many it appears that after this experience of seventy years France found she could not profitably maintain the system any longer. She therefore gave it up. It might thus seem a fair question to ask—What reason have we for believing that the system would not again break down if it were re-established?

The rupture of the ratio in France.

The question here raised is a very important one, because of the stress often laid upon it. There is, however, no difficulty in answering it. In the first place, although France, owing to her large stocks of gold

and silver, is a strong monetary Power, she is not strong when compared even with Great Britain and her colonies. Much more is this the case when we further take into account the other nations of Europe, the United States of America, and the remaining portions of the commercial world. So that when we consider that France practically performed the work of holding the ratio between the two metals steady for nearly seventy years we may judge what the effect would be if other great nations joined her in this work instead of, not merely holding aloof from her but actually working against her, as was the case during those seventy years.

Influence
of the
American
ratio on
the French
ratio.

In taking this view of the maintenance by France of a $15\frac{1}{2}$ to 1 ratio, it is not forgotten that America from 1792 to 1834 had a ratio of 15 to 1, and from 1834 to 1873 a ratio of 16 to 1. These respective conditions in America would no doubt help to prevent the market rates in other parts of the world from varying very much. From 1792 to

1834 the gold price of silver could not rise above a ratio of 15 to 1. And from 1834 to 1873 the gold price of silver could not fall below a ratio of 16 to 1. But, whilst assisting to maintain all over the world a ratio of between 15 and 16 to 1, the American ratio would be rather a hindrance than a help to France in maintaining the $15\frac{1}{2}$ to 1 ratio. For until 1834, inasmuch as the American ratio was more favourable to silver and less favourable to gold than the French ratio, it was inevitable that silver would tend to find its way to America rather than to France, and that gold would tend to find its way to France rather than to America. But after 1834, when the American ratio was 16 to 1, the conditions were reversed. The American ratio was less favourable to silver and more favourable to gold. Consequently gold tended to go to America and silver to France.

The ability of France to maintain the ratio strengthens a previous contention as to the comparative utility of the two metals for the

purpose of money. For, owing to the varied conditions under which currency laws were working in other countries, France in her international exchanges during these seventy years at one period parted with a large quantity of gold and at another parted with a large quantity of silver. But though these conditions prevailed in turn, they caused France little or no inconvenience. The bimetallic system did not break down through any weakness of its own, nor through any great strain peculiar to the work for which it was devised. On the contrary, it had several times proved itself strong enough to withstand severe tests, and only gave way under very extreme and extraordinary pressure. The closing of the mints to silver in France was really one of the immediate consequences of the war between France and Germany. As a penalty for that war, France had to pay to Germany a sum in gold equal to two hundred million pounds sterling. At that time the money of Germany was silver, but Germany, having consolidated herself

became impressed with the necessity for simplifying the coinage and making it more uniform throughout the various States of the Empire, and felt that an opportunity was afforded her by her victorious position and by the receipt of the war indemnity of two hundred million pounds. She therefore decided to adopt the gold standard. In so doing she followed the example set by England as long ago as 1816, apparently under the false impression that England's prosperity was largely due to her gold money. Germany, having decided to change from silver money to gold money, began to send her silver into France in exchange for other things. This, and the payment of the war indemnity in gold, appeared to the French people likely to cause a greater strain on their currency system than it was able to bear, and no doubt spite against Germany had not a little to do with the action of the conquered nation. Hence came the closing of the French mints and the consequent loss of the par of exchange between the metals—a par

which France had maintained almost single-handed, so to speak, against the whole world for nearly seventy years.

The rupture of the ratio not brought about by increased production of silver.

This was the real and sufficient reason for the rupture of the ratio. It is, however, somewhat generally held that there was a still more potent cause, namely, the so-called excessive increase in the production of silver which was taking place at that time.

This opinion partakes, however, of the nature of a random statement, and does not rest upon a valid argument. It certainly is not justified by the facts of the case. It cannot, of course, be denied that, as compared with the production of the previous twenty years, there was at that time a considerable increase in the production of silver, both absolutely and in its relation to gold. But let us go back further than these twenty years. We have a right to do so, since this particular ratio of $15\frac{1}{2}$ to 1 prevailed for fifty years prior to these last twenty years of the bimetallic *régime*. We then find that the production of silver was very much

larger in its relation to gold—in fact, more than twice as large—than at the period when bimetallism thus came to a violent end. Why, then, should we suppose that in this matter of relative production of the metals bimetallism was in 1873 unable to bear a strain so much less severe than that which it easily resisted in the earlier part of the century? Furthermore, the increase of silver was very small as compared with that abnormal increase in the production of gold which arose out of the discoveries in California and Australia in the 'fifties and 'sixties. And yet this much more startling influx of gold did not strain the ratio to breaking point. No gold monometallist can consistently maintain that the silver he despises so much was more powerful in its influence than his much-belauded yellow metal.

The following statistics will be of service here :—

PRODUCTION OF THE PRECIOUS METALS.

COMPILED BY DR. ADOLPH SOETBEER.*

Converted from Kilogrammes into Troy Ounces.

PERIODS.	GOLD.	SILVER.	Proportion of Silver to One of Gold.
	Oz. Troy.	Oz. Troy.	
1801—10	571,562	28,746,922	50·2
1811—20	367,957	17,385,756	47·2
1821—30	457,045	14,807,005	32·4
1831—40	652,292	19,175,868	29·4
1841—50	1,760,502	25,090,342	14·2
1851—55	6,410,325	28,488,598	4·4
1856—60	6,486,262	29,095,428	4·5
1861—65	5,949,583	35,401,973	5·9
1866—70	6,270,086	43,051,583	6·9
1871—75	5,591,014	63,317,014	11·3

These statistics very plainly show that there was nothing alarming about this increase of silver, and they fully confirm the statement just made that, about the time when silver was demonetised in Europe, the production of silver in relation to that of gold was very much below what it had been

* See page 146 in Appendix to Final Report of Royal Commission "appointed to inquire into the recent changes in the relative value of the precious metals."

for the fifty years following the establishment of the $15\frac{1}{2}$ to 1 ratio. They show that for ten years at the beginning of the century the average annual production had been as high as 50·2 ounces of silver to 1 ounce of gold—a proportion admittedly greater than anything experienced since that time. But it is curious to note that it was during this very period, 1801 to 1810, that the ratio was fixed, when, arguing from monometallist premises, the inconvenience should have been most keenly felt.

And if we take the first fifty years of the present century we find that the total production of gold was 38,093,580 ounces, and that the total production of silver was 1,052,058,930 ounces. This gives a rate of 27·61 ounces of silver to 1 ounce of gold. During the succeeding 20 years, 1851 to 1870—the time of the flood of gold—the total production of gold was 125,581,280 ounces, and that of silver was 680,187,910 ounces. This gives a rate of 5·41 ounces of silver to 1 ounce of gold. Now during the five years

1871 to 1875 inclusive—the period in which bimetallism was broken up—the total production of gold was 27,995,070 ounces, and the total production of silver was 316,585,070 ounces. This gives a rate of only 11·3 ounces of silver to 1 ounce of gold. Not only was there during these five years this small production of silver relatively to that of gold—small, that is, as contrasted with the production of silver relatively to that of gold in the first half of the century—but there was a large demand for silver on the part of India in payment for cotton exported to Europe. For India at this time was developing her cotton fields in her efforts to supplement the American supplies, which for some years had been running short as a consequence of the war between the North and the South. And, therefore, it cannot be said that the production of silver, which amounted to only 11·3 ounces of silver to 1 of gold, was the cause of the rupture of a ratio which was fixed when the production was 50·2 ounces of silver to 1

ounce of gold—a ratio which managed to survive for a period of no less than 70 years, during 50 of which the production was, on an average, 27·61 ounces of silver to 1 ounce of gold.

Moreover, if any valid argument for the rupture of the $15\frac{1}{2}$ to 1 ratio could be founded on the increase in the production of silver, a still more valid argument in support of the demonetisation of gold could have been founded on the much greater increase in the production of gold from 1851 to 1870. For although the average annual production of silver, which from 1851 to 1870 was 34,009,395 ounces, increased in the five years 1871 to 1875 to an average annual production of 63,317,014 ounces, or an increase of 86 per cent., the average annual production of gold, which for the twenty years 1831 to 1850 was 1,206,397 ounces, increased in the years 1851 to 1870 to an average annual production of 6,279,064 ounces, being an increase of over 420 per cent. There can thus be no possible doubt that the cause of this

particular rupture in the ratio between gold and silver is not to be found in an excessive production of silver as compared with that of gold, but, as previously stated, in the circumstances following on the Franco-German war, and in the change from a silver standard to a gold standard on the part of Germany.

Why gold and silver now vary in their relative values, although both are used for money.

We can imagine some one asking—Why, since there are some countries which work on a silver monetary standard just as we work upon a gold monetary standard, each being used for the same purpose, should such a rupture have come about at all ?

It is, of course, true that silver standard countries practically coin silver on the same principle as that on which we coin gold—that is to say, they will coin any quantity of it free of charge to the person who takes it to the mint. But, although both metals are used for money by the respective nations of the world according to their custom, this is a totally different thing from the free coinage of both metals and the use of them for full

legal tender money in the *same* countries. It is the absence of this latter condition which causes the two metals to be always varying in value in relation to each other. Under our existing monometallic conditions there are two separate and distinct moneys, so far as their circulation is concerned, since each country adopts one of the metals only as full legal tender, equal terms being denied to the other. But under the proposed bimetallic conditions, as we have already seen, there would be only one money, made up by a sort of partnership of the two metals—a money not peculiar to any one country, but common to all the metallic money countries of the world.

CHAPTER XIII.

MONOMETALLISM A SYSTEM INVOLVING MONOPOLY AND PROTECTION.

WE cannot single out any one substance for the fulfilment of the function of money, or any other function, so long as there is any other substance which can be conveniently used for the same function, without at the same time conferring a monopoly upon the one which we single out. We give that one a distinctly superior position.

Gold in gold standard countries occupies this privileged position, and silver does the same in silver standard countries. The chosen metal is, in fact, as regards this very common and very important purpose of money, protected against fair competition on the part of the other. It is, therefore, legitimate to hold

Gold and silver at present prevented from fairly competing against each other.

that monometallism must involve the harmful principles of monopoly and protection.

The details of the *method* by which it is proposed to give to two substances which can be conveniently used for fulfilling the function of money equal opportunity for competition are not here under discussion. It is the *fairness* of such competition upon which we are now laying stress. And if, in this respect, the two metals are to be put on an equal footing, there is but one course open to us. When we have once determined what shall be the weight of one of the metals which shall represent the monetary unit of a country, we have no alternative but to determine what shall be the weight of the other metal which shall represent the same unit. The coins thus formed out of these metals will then have between them a fixed ratio of paying power. The bearing of this is well illustrated by the fixed ratio of purchasing power between our present gold and silver coins. And it is undoubtedly

Fair competition and equal liberty between the metals cannot exist in the absence of a legal ratio.

Our exist-
ing silver
coins
deceptive.

this plausible and deceptive appearance of bimetallism in our existing coins which, to many people, makes the real thing not very easy to comprehend. As was before mentioned, the metal in our silver coins at the present time is less than half the face value of the coins. Real bimetallism, however, will provide that the coin and the metal out of which it is formed shall be practically of equal value. And it will also provide that the gold and silver coins of our own country shall not only have a fixed ratio of value to one another, but that they shall have a fixed ratio of value to the coins of other countries.

A palpable advantage would clearly be gained if the monetary units of all the great commercial countries could always bear a constant ratio among themselves, as is at present the case in all measures of weight, length, and capacity. Why should we not add that most important case of "value" to the list? Since gold and silver are, and will continue to be, used by trading

nations for the measurement of value, so happy a consummation would most naturally be brought about by fixing a ratio between these two metals.

It may be advisable to remember that the monopoly in monometallism consists in not according to one of the two metals the same privilege as is accorded to the other. We may distinguish three directions in which the monopolist principle chiefly declares itself:—

- (1) In not allowing free mintage to the rejected metal.
- (2) In not allowing the rejected metal to be held in reserve by the national bank for the redemption of the notes issued.
- (3) In not allowing the rejected metal to be used as legal tender beyond a certain limited amount.

Bimetallism is the direct contrary of all this. It takes the metals which are fitted to compete with each other and treats them on an equal footing. It is

Bimetal-
lism
founded
on a more
natural
basis than
mono-
metallism.

thus founded on a basis far more natural than that upon which monometallism rests. For in order to meet the evils of a deliberate protection of one metal against the other, monometallists are driven to accept such arbitrary expedients as the making of token coins out of the rejected metal, which coins represent a higher value than they possess as bullion. Monometallism thus stands convicted of the worst features of monopoly and protection.

CHAPTER XIV.

CREDITORS AND THE CHOICE OF METALS.

It has been argued that, in the event of the two metals being put upon an equal footing as regards free coinage and unlimited legal tender, the creditor should have quite as much right as the debtor to a choice of either metal when a transaction is about to be settled. The reply is simple. All that is, or ought to be, or indeed can be, required of the debtor is that he should pay in "legal tender." The creditor has no choice whatever in the matter, nor ought he to have, unless he made a specific bargain when entering into the contract. He must, and as a matter of fact does, and always will, rest content with the "lawful money" of the country. If both parties were to have an

The respective positions of creditor and debtor in regard to legal tender.

equal right to decide which metal should pass between them, endless confusion would result, and our law courts would be busier than they are.

The implication underlying this particular suggestion is that the debtor would derive some advantage from having the power of choice. Even if such an advantage did exist, the creditor in his turn becomes a debtor, and passes on what he has received. But bimetallists deny absolutely that there could be any such advantage under the conditions of a fixed ratio.

Ratio
broken if
creditors
could
choose but
main-
tained by
debtors
having
power to
choose.

Another reason why creditors should not have the right to choose in which metal they will accept payment is that they would naturally demand to be paid in that metal which was becoming the scarcer, and which was therefore tending to become the dearer. The demand for the other metal would thereby necessarily be diminished, and its value would tend to decrease. The demand for the scarcer metal would continue to increase, whilst for the more plentiful metal the

demand would continue to decrease. Thus the ratio would soon be broken, and the values of the metals would diverge more and more without the remotest prospect or chance of their ever coming back again to the starting point. But the conditions are reversed when the debtors can choose in which metal they will discharge their liabilities. They naturally elect to use the metal which for the time being is the more plentiful, and which is therefore tending to become the cheaper. The demand for it is thereby strengthened, and its value tends to increase. This increased demand also weakens the demand for that metal which is becoming the scarcer, and which is therefore tending to become the dearer. The effect of this is that, though the values of the metals may now and again tend to diverge, they cannot actually do so. In short, to give the creditor the right to choose might soon destroy the ratio. But when the debtor has this right the ratio is naturally and imperceptibly maintained, and the creditor suffers no disadvantage.

Debtors
would
need a
double
amount of
money if
choice
rested
with
creditors.

Further, the suggestion that the creditor should have the option can be shown to be ridiculously absurd. For if the power of choice should rest with the creditor it is obvious that every debtor would need to provide himself with a double amount of money. Otherwise he would not be in a position to pay in gold or in silver as the creditor might demand. Banks would of course be placed in the same predicament. But so long as the choice rested with the debtor, banks, as debtors, would derive an advantage, inasmuch as they would be better able by their power of choice to check any run which might be made upon them in times of stress. And the public would also in its turn derive an advantage from the diminished risk of financial panic, and of the serious contraction of credit.

CHAPTER XV.

THE BEARING OF "GRESHAM'S LAW" ON BIMETALLISM.

It would seem that some such scheme as the fixing of a ratio between the money metals is essential if we are to secure the unfettered operation of the principles of liberty or economic freedom in the supply of money. There is an aspect of this matter, however, to which allusion has not yet been directly made. The well-known "Gresham's Law," it is alleged, upsets all these bimetallic theories. The general purport of this law is that the cheaper money sooner or later drives out the dearer money, so that eventually only the cheaper money is left.

As a matter of fact, "Gresham's Law" is "Gresham's Law" a
nothing else than that simple and natural

particular
case of the
general
law of
least re-
sistance.

application of a principle in accordance with which we are impelled, when we have more than one means of effecting a given purpose, to pursue the course of least resistance. The "law of substitution," with which we have already dealt, is the same thing in different words. It is really a fundamental law of our nature, prompting us to fulfil any particular purpose by the use of that thing which, to the best of our knowledge, is the easiest to get, or by the adoption of that method which is the easiest to carry out. For, in getting hold of money, or in parting with it, we are actuated by principles similar to those which rule our other actions. And what is true of individuals is true of the nations which are composed of those individuals. Thus we can easily see that under national, as distinct from international, bimetallism the metal which for the time being is the more abundant and the more easily acquired will be more in use for the particular purpose of money. It could not be otherwise. And even under international bimetallism there might now and

again, for a short time, be a slight tendency in this direction, according as one or other of the money substances became for a time the easier to become possessed of. But what would that matter so long as our purpose was equally well fulfilled? It would only be akin to our using more beef or more mutton for the purpose of meat when one of these meat substances was more plentiful or more easily obtained than the other. Obviously, this would not be to “drive out” the metal which was temporarily the scarcer and the more difficult to acquire, for, if one of the metals became more plentiful, the effect would be simply that of an addition to the whole quantity of money. Under any circumstances the quantity of either metal which is now appropriated for money is too great to be “driven out” by the other.

Let us with regard to this “driving out” phase of the question take an extreme case. Suppose, solely for the sake of argument, it were even possible that the metal which

was the more plentiful and the more easily acquired entirely took the place of the other for this purpose of money, what harm would be done? We should at any rate have no reduction in the quantity of money, for such a case could not possibly occur unless one of the metals should happen to become sufficiently abundant to fully take the place of the other. And if such a total displacement did occur the metal which was driven out of use for money would only have succumbed to that inexorable law of nature known as "the survival of the fittest." Moreover, it would be far better, if there is to be disuse at all, that this disuse of one of the metals for money should come about in a natural way, than that one of them should be preferentially singled out and rigidly adhered to for this purpose, however unfit it might become by reason of its great scarcity. But here, of course, we are in the region of imagination, for it would be almost impossible with international bimetallism, even if only two or three of the leading nations of

the world agreed to its adoption, for either metal to drive the other out.

Certain people seem to be possessed with the idea that the cheaper metal is also the inferior one for the fulfilment of the monetary function. But the idea is absurd. In other branches of economics the more cheaply a purpose can be satisfactorily fulfilled the better we deem it to be for us, for it liberates some of our buying power, and thus enables us the better to fulfil other purposes and the better to satisfy other wants.

The cheaper article not necessarily the inferior one for a given purpose.

When people talk about the cheaper metal being the inferior one they are generally thinking of silver, and imagine that, under bimetallism, silver would eventually drive gold out of use for the monetary purpose. They forget that, although silver, as compared weight for weight with gold, is, of course, the cheaper of the two, yet gold is quite as liable, and in fact more liable, to fluctuate both in quantity and purchasing power. So that it is an error to think that the "cheaper metal," from the monetary point

Gold quite as liable as silver to fluctuate in value.

of view, is necessarily silver. The cheaper metal is that one which for the time being is falling in relation to the other. The table already given to illustrate the production of gold and silver shows that the production of silver has been of remarkably steady growth, whereas that of gold has not. In any case the liability to fluctuate applies as naturally to gold as to silver. Consequently, from this point of view, their respective chances of being driven out of the monetary use are about equal.

We must also reckon with another consideration. Before either of the metals could be driven out for the monetary purpose there would have to be an abnormal demand for it for other purposes—that is to say, for use in the arts and crafts. And this abnormal demand could not arise in the face of any falling-off in the demand for the metal for the monetary purpose. For it has already been explained that the use of gold and silver for money has much influence on their use for other purposes.

There is thus no ground for fearing that, under bimetallic conditions, one or other of the metals might go out of the monetary use.

It is often asserted that the precious metals fluctuated in relation to each other during the period when bimetallism was in operation in France. From a practical point of view a direct negative might be given to this assertion. As a matter of fact the amount of the variations, even outside France, was hardly ever greater than the cost, on the one hand, of exporting gold or silver to France, or, on the other hand, of the carriage of gold or silver from France. And, as regards France herself, we find that her people used the mints to coin both gold and silver at a fixed ratio during every single year of the seventy of her bimetallic *régime* with the one exception of 1860. Thus it paid people in Paris to sell both gold and silver at a fixed price—a practical proof of the steadiness of the ratio.

The experience of France as regards fluctuations between gold and silver under bimetal-
lism.

Moreover, it is admitted that France, by her action in maintaining a stable ratio

between the metals, rendered an enormous service to the world. And it must be remembered that France stood almost alone among the nations of the world in maintaining the union between gold and silver, and in according in this way to both metals equal rights and privileges and equal liberty to be used for the purpose of money. Consequently, the other nations naturally became a vast open market ready to receive from France that metal which for the time being was more in demand as compared with the other, and equally ready to part with the one which was less in demand. And thus, having regard to the size of France and her trade as compared with the rest of the world, what could be expected but that the quantity of gold money and of silver money in France would vary considerably? But this, as previously stated, occurred without causing her any inconvenience.

"Gresham's Law" in-operative under

Under international bimetallism, however, the relative value of the two metals would be practically the same in all countries. There

would be no alternate risings and fallings of one metal as compared with the other, since all countries would be on exactly the same footing in regard to both metals, and there would, therefore, be no sufficient cause at work to bring variations about. In short, under international bimetallism, when the two metals would be practically identical for the monetary use wherever metallic money was employed, “Gresham’s Law” would be inoperative. There would, indeed, be less likelihood that either gold or silver would be driven out of use as money than there now is that either beef or mutton will be driven out of use as meat.

CHAPTER XVI.

BIMETALLISM MORE JUST THAN MONOMETALLISM.

SUPPOSING bimetallism to be put into operation by the great nations of the world, what benefits might we expect to derive from it? In the first place, more equitable conditions would be brought about between the producers of gold and the producers of silver, as also between the owners of gold and the owners of silver. This would be done without introducing between the producers or owners of these two metals any condition which does not obtain between the producers or owners of other kinds of commodities. For both metals would be put upon a similar and equal footing in regard to that all-important factor "demand

for the purpose of money," and in regard to the influence which that demand exercises in other directions, such as those of the arts and crafts, loans, hoards, and so forth.

But the interests of the producers of gold and silver are, comparatively, of minor importance. We have to consider all those wider interests, industrial and social, in connection with which money is so useful an agent and plays so important a part. For money has in these wider spheres a much more complex and far-reaching influence than many people imagine.

The true importance of money lies in the fact that its functions as the authorised medium of exchange and statutory measure of value constitute it the common instrument for the adjustment of rights, whether between individuals or classes. In short, it is the conventional and lawful instrument for the determination of equity between man and man. Its function as a medium of exchange—a hand-to-hand and day-to-day carrier

Money the instrument for the determination of equity.

of value—is not by any means its sole function. If there were no such things as monetary loans, no leases, no long period contracts, if “credit” had never been started, and if the trade of each country was confined within its own borders, then the work of money would not be nearly so important as it is, nor would the choice of materials for the monetary instrument be a question of very great moment. But, as things are, this choice is a matter which necessitates very careful consideration. The first and most essential characteristic of a just money is stability of value. Convenience in use has the second place. These two phases of the subject now claim our attention.

CHAPTER XVII.

GREATER CONVENIENCE OF A TWO-METAL MONEY.

THERE can be no doubt that money is the outcome of the division of labour—that is to say, the outcome of the exchange of services between one person and another. Money is, of course, the common means for exchanging commodities. But commodities themselves are simply the substantial result of services directly or indirectly rendered. Now, since money is essential for the payment of the wages of labour, unless it is convenient for this purpose it is not fit to be money.

Who would say that gold by itself is a convenient money with which to make direct payment for services rendered? It

Money the
outcome
of the
division
of labour.

Gold
money
not con-
venient
for wages

and small
payments
generally.

would not be an easy matter to pay wages in gold alone. For, under present conditions, a payment which required any fraction of a sovereign other than our half-sovereign could not well be made in gold. Then, again, in daily intercourse we have to make small payments which it would be impossible to make in gold. Even if we could manage all our retail purchases with shopkeepers who would trust us with a view to ultimate payment in gold, there would still be many small items of expenditure incurred in travelling about, in seeing the sights, in hearing music, in collections, subscriptions, and many other like ways. And if it would be highly inconvenient in this country to carry on our affairs with gold alone, how much more inconvenient would it be in other parts of our Empire, where services and commodities are exchanged for much smaller sums than here ?

Banking
facilities
and large
payments.

On the other hand, it must be admitted that gold is better than silver for the settlement of large amounts, and, in fact, for

wholesale trade generally. But is it so superior to silver for large payments and wholesale trade as we are apt to think? If it were compulsory to pay in silver or to receive in silver all the sums which can now be paid or received in gold we should, of course, be subjected to some additional inconvenience. We must, however, remember the facilities which bankers render to traders in the payment and receipt of large amounts. Gold itself is not so frequently passed from hand to hand as it would necessarily have to be in the absence of banks. And, even if we went so far as to make silver the *only* lawful medium of exchange, any slight inconvenience to which traders might be put would be to a large extent avoided if they availed themselves more freely of the services which bankers render.

Now the metal which is essential for the payment of small sums, and which only involves a trifle more labour in the case of large amounts, must of necessity be a more convenient metal for general use than the

one which, though a trifle more suitable in large transactions, cannot in small ones be used at all.

Silver
money and
banking
interests.

It may not be out of place here to allude briefly to the benefit which might accrue to the banking interest by the increased use of silver in consequence of the additional business—the greater number of cheques—that would pass through their hands. Many bankers are of opinion that silver money would not be so good for them as gold money. And yet, with regard to the extra weight of silver, it is clear that for internal trade the difficulty is obviated by means of notes, while in international transactions the shipment of £1,000,000 in gold costs just as much as the shipment of £1,000,000 in silver. Bankers may also suspect that silver would imply more labour in proportion to the turnover—more work for the same commission. Perhaps they forget or overlook the fact that they perform a service which is much appreciated and valued by the community, and that the

charge for this service is very much in their own hands. We are not, however, discussing bankers' interests, nor yet the question as to which of the two metals would be the more convenient if used alone.

The point at issue is whether it would not be more convenient to be free to use either gold or silver, according as the one or the other happened to best suit our ends, rather than to be restricted to the use of one of them. Money is an instrument for doing a particular kind of work. Now the greatest efficiency of the whole is to be obtained from the greatest efficiency of all its parts. And inasmuch as silver is the more efficient and economical for some monetary work, and gold the more efficient and economical for other monetary work, it behoves us to give full weight to this aspect of the subject, and to realise the much more important conveniences which will arise from having the two metals at our service instead of one.

Liberty to use either gold or silver for money more convenient than to be restricted to one metal.

It has been contended that since copper is so necessary for the smallest payments of

Copper not fit for standard money.

all, such as for newspapers, tram fares, and so forth, we ought, on the principles advocated by bimetallists, to contemplate the free mintage of copper also. In considering this idea we must keep in mind two facts. First of all, it must be remembered that copper has not now, and never has had, the privilege of free mintage given to it in any part of the world. Secondly, the quantity of copper used in copper coins is very small compared with the quantity used in all the other things for which copper is in request. This enormous disproportion alone unfits it for meriting the least consideration in this connection. Copper is not, therefore, entitled to the rank of a monetary metal. Its present position as "token money" meets all the requirements of the case. Further, if by any process of reasoning it could be shown that, under present conditions, the idea of monetising copper possessed any force whatever, then it would naturally follow that other substances might be brought into the category, and thus

the question which is put to bimetallists—Why not monetise pig iron?—would not, after all, be so very ridiculous. But surely, in the fulfilment of the monetary purpose, as well as in the fulfilment of other purposes, we must have some regard for the fitness of things. To suggest the use of pig iron for money when more suitable materials are at hand is about as amusing and as reasonable as to suggest the use of timber for food.

Gold and silver are the only metals which have asserted themselves by a process of natural selection as holding positions of well nigh equal utility for doing the monetary work of the world. The adoption of any additional metal for standard money is out of the question.

CHAPTER XVIII.

PRICE AND VALUE.

Price and
value de-
fined.

BEFORE directly dealing with the most important characteristic of a just money, namely, stability of value, it is necessary that we should clearly distinguish between value and price. "Stability of value" certainly does not mean "stability of price." For if we take the same thing at different times we may find that it has varied in price but not in value, or that it has varied in value but not in price. By "value" we mean *general* purchasing power. And if we were to say that a thing was stable in value we should mean that its purchasing power, as measured by a large number of commodities in common use taken collectively, was steady. But by "price"

we mean a *particular* purchasing power, or the power of a commodity to purchase or obtain in exchange that particular thing which we call money. And thus, whilst stability of value means stability in relation to commodities in general, stability of price means stability in relation to money only. It is money, and money alone, that is the pricing instrument. Of money itself it must be said that, whilst it has a value, it has no price; whereas all other things have both a value and a price.

The distinction between price and value is easily illustrated. We have it in gold itself. For, whilst the price of gold at the Mint never varies from £3 17s. 10½*d.* an ounce, the value or general purchasing power of an ounce of gold changes very frequently. Or, to give a further illustration, let us suppose an income of £600 in America to have only the same general purchasing power as an income of £500 in England. That is to say, it will take £600 in America to satisfy our wants to the same extent as £500 would

Illustrations of the distinction between price and value.

satisfy them in England. The difference in the price of the things purchased in the respective countries is, of course, quite obvious. On the other hand, since we assume that the commodities would be similar in quantity and quality in both countries, their value would be the same. Let us take still another illustration. Suppose we pay a shilling for a pound of butter, and that some time afterwards we pay ninepence for the same weight of butter of the same quality. The *price* would clearly have fallen threepence per pound, and we might be tempted to assume that the *value* of the butter would also have fallen in the same proportion. But we should have to go very carefully into the matter before we could safely conclude that this was really the case. The real facts could only be obtained by ascertaining at the respective times the ratio of exchange between the butter and a large number of selected commodities in common use, which could be done by comparing at the respective times the ratio between a shilling

and the same selected commodities. If we found that on the second occasion with, say, fifty pounds of butter we could obtain as much of fifty other things in common use as we could have obtained with fifty pounds of butter on the first occasion, then we should have reasonable proof that the butter had not altered in value, because it would have maintained an undisturbed relation to those fifty things. It would then be plain that the value of the butter had not decreased, although its price had decreased. It would also be plain that the value of the shilling had increased to such a degree that ninepence had now the same general purchasing power that twelpence formerly had. In short, the *price* of anything is determined by the quantity of *money* it will exchange for—that is, by its relation to the one thing, money. But the *value* of anything is determined by the quantity of *commodities in general* for which it will exchange—that is, by its relation to commodities as a whole.

Price and value two distinct measurements of the same thing.

In opposition to this it is argued that if the price of a pound of butter be one shilling, the shilling and the pound of butter are equal in value. And if they are equal in value it necessarily follows that there is no distinction between the price of the butter and the value of it. In other words, it is argued that the price of anything determines that the value of the thing and the value of the money are equal, and, consequently, even if it is not positively unsound, it is, at any rate, a case of splitting straws to draw any distinction between price and value.

Such a line of argument, as the reader can infer from what has already been said, ignores the changes that take place in the price or in the value of the butter, or in the value of the shilling. We must have in our minds the element of time as affording an opportunity for change. We are, of course, bound to admit that, at any particular time, when a shilling and a pound of butter are, or can be, exchanged for each other the

shilling and the butter may be said to be of equal value. We may go further and say that, inasmuch as parts which are equal to one another bear the same relation to the whole, it follows that commodities which, for the moment, are equal to one another in price must bear the same relation to the whole body of commodities, and must, therefore, be equal in *value*. But how small is the ground which such an admission really covers. The difference of time renders it practically of no account in a general consideration of price and value. For, when we take the actual conditions of a market into account, it is perfectly clear that the butter will change in price from time to time; and the extent of the change as it takes place will be patent to all from the market quotations. But it is not nearly so clear in what way changes in its value may from time to time be taking place, nor is the extent of each change in value easy to ascertain. It is here that the whole difficulty with many people comes in. For, when a change of price

occurs—that is to say, when there is a change in the relation between money and any single commodity—people, as a rule, fix their minds on the *commodity* as the cause of the change. They never for a moment suspect that the pricing instrument itself—the money—is liable to change in value, and in fact does frequently so change. When once they recognise this liability of money to vary in value they will be able to see that, with an unstable money, although the price of a commodity may have remained steady yet its value may have been unsteady, or the value may have been steady and the price unsteady. Changes in the value of the butter will depend, as was before shown, not on the relation between the butter and the money, but on the relation between the butter and commodities in general. Consequently, the mere fact of a change in the relation between money and any other one thing tells us little or nothing conclusively as to which of the two has really changed. For three cases are possible. The money

may have changed in its relation to commodities as a whole, and the one commodity may have remained steady in this relation. Or the commodity may have changed and the money may have remained steady. Or both the money and the commodity may have changed equally or unequally in their relation to commodities as a whole. In short, since a thing can change in price without changing in its general purchasing power it follows that a thing can change in price without changing in value. And thus we prove that price and value are two distinct measurements of one and the same thing.

We may, therefore, fairly ask whether, since price and value are almost universally deemed to have the same meaning, it does not behove us to devise some method by which our pricing instrument may itself be kept at a steady value.

A pricing instrument should maintain a steady value.

CHAPTER XIX.

GREATER STABILITY OF A TWO-METAL MONEY.

HAVING seen how important it is that money should be stable in value, we must proceed to show that the two metals, if yoked together under bimetallic conditions, would provide us with a money which would maintain a more steady relation to commodities in general than either of the two metals used apart as at present.

A standard by which to ascertain the relation between money and commodities.

In the first place, it is necessary to show how the relation, steady or otherwise, between money and commodities as a whole can be ascertained. The whole mass of commodities in the world, considered as forming one huge group, gives the true amount of value in the world at any given time. Consequently, a perfectly true unit of

value would be a given part of this huge group. It is, however, obviously impossible to form a unit of value so mathematically exact as this would be, and even if possible it would be unnecessary. Our purpose is amply served if we take a sufficiently large group of those commodities which are in common use, and which can be regarded as fairly representative of the entire mass.

Several tables under the name of "Index Numbers" have been compiled with this object. Three of these have obtained general recognition at the present time. One is compiled by the "Economist" newspaper, and is based upon a group of twenty-two commodities ; another, by Mr. A. Sauerbeck, is based upon a group of forty-five commodities ; and the third, compiled by the late Dr. Soetbeer, is based upon a group of one hundred commodities. Notwithstanding that these three tables differ so widely in the number of commodities on which they are respectively based, the results derived from the calculations based on each group are

practically the same, and thus justify the belief that Sauerbeck's list of forty-five, which is the one most commonly adopted, is ample for all practical purposes.

Now, although a unit formed of a given quantity of each of these forty-five commodities can be relied on as a just standard by which to compare and test the variations in the values of any single commodity, it is quite obvious that such a standard cannot be used as the actual working measure of value. Consequently, we have no alternative but to select one or two commodities which will, as nearly as possible, maintain a steady relation to the group as a whole. And the question is whether gold and silver, united in a sort of partnership under bimetallic conditions, will not maintain a more steady relation to the group than either of these two metals used separately. At present we use 123 grains of gold as our standard for measuring value, and we give the name of Pound to this standard. But, though this unit is formed by the use of gold, it is obvious that a certain amount of

value does not belong to a given quantity of gold any more than to a given quantity of silver. As a matter of fact, some countries attach a certain value to a certain weight of silver just as we in England attach a certain value to a certain weight of gold. Consequently, the question is narrowed down to the issue as to whether the relation between our units of value and a given quantity of these forty-five commodities would not be more steady if gold and silver were both admitted under bimetallic conditions to the right of being used for the supply of these units than is now the case under monometallic conditions. In answer to this, it is generally acknowledged that silver and gold are the two most stable commodities. Further, it is obvious that they together bear twice as large a proportion to the standard group as either gold by itself or silver by itself. We know that, notwithstanding the comparative stability of gold and silver, each of them now and again undergoes marked variations in value. It necessarily follows that the two added

together will bear a more steady relation to the forty-five than either of them taken separately. For example, suppose we have a group made up of a given quantity of each of forty-five commodities, and the price of this group is, say, "ten pounds" in gold money, the price of the group would be increased or decreased to the extent of every increase or decrease in the total quantity of gold pounds. But if the pounds were made up partly of gold and partly of silver, then the price of the group would increase or decrease only according to the increase or decrease in the total quantity of gold and silver pounds added together.

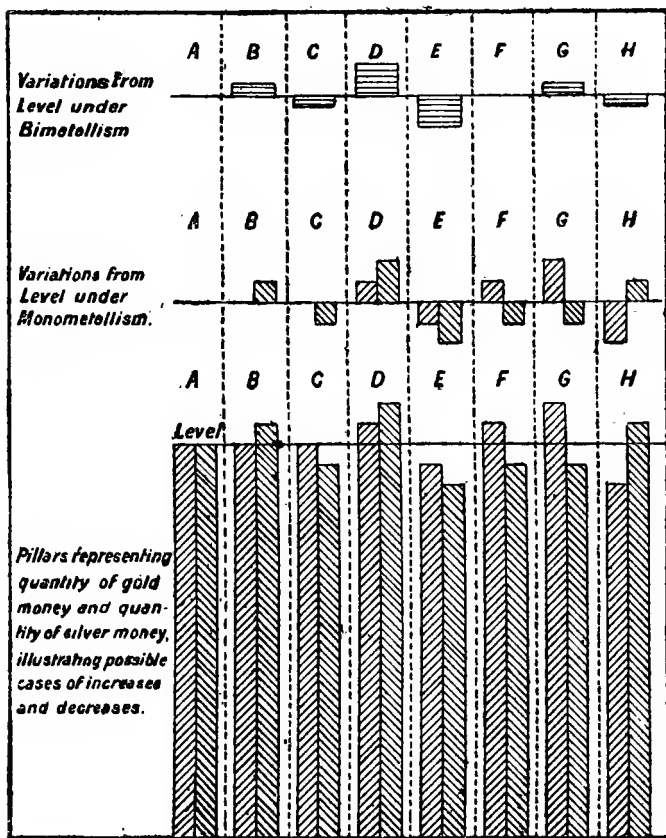
Illustrations of the various results of possible changes in the quantity of money under both systems.

We can illustrate by means of a diagram the various results of all the possible changes in the quantities of the two moneys, and we can show, on the one hand, what will be the effect of these changes on the two moneys under monometallic conditions—that is, when each money is doing the money work separately ; and, on the other hand, what will be their effect under bimetallic conditions—that

is, when the two are brought together as one money.

For the sake of convenience we assume that the quantity of gold money and the quantity of silver money are equal, and that, therefore, the two moneys stand at the same level. The variations will, of course, start from this level. It must be understood that out of all the possible cases which may arise there are three in which bimetallism will not give any advantage over monometallism. The first is that in which the quantity of gold money and the quantity of silver money remain unaltered; the second is that in which the quantities of the two moneys increase at the same rate; and the third is that in which the quantities of the two moneys decrease at the same rate. But neither can monometallism in any of these three cases claim any advantage over bimetallism. They may, therefore, be disregarded. The direction of all the other possible changes and their effects are indicated in the following diagram.

DIAGRAM ILLUSTRATING THE RESULTS OF VARIATIONS IN THE QUANTITY OF MONEY UNDER MONOMETALLISM AND BIMETALLISM RESPECTIVELY.



Appended is a description of the diagram on the preceding page.

The pillars are in pairs, one of each pair representing gold and the other silver. They are intended to represent the total stock of each of the precious metals appropriated for the money use at any given time. It is a matter of indifference which of the two columns in each pair we take to represent either of the metals, since we are now only concerned with the relation between the two. The height above or below the line shows whether the stock is increasing or decreasing as compared with the starting point. Immediately above the pillars the increases and decreases are given separately, and show the variations from the level under monometallism. Above these again are given variations from the level under bimetallism. It must, of course, be remembered that under monometallism the gold money and the silver money are separate and distinct moneys, and that under bimetallism the gold money and the silver money are not separate and distinct, but only the component parts of one money. It will also be noticed that under bimetallism there is never any divergence between the two component parts or forms of money.

At A the two metals are at the same level.

At B we see that one remains stationary and the other increases.

Under monometallism the increase in the one will affect the level of that one to the full extent of the increase, and the divergence between the two moneys will also be to the

full extent of this increase. But under bimetalism what would have been the addition to the one will be halved by being spread over the other also.

At C we have the case where one remains stationary and the other decreases.

The results are on the same lines as those at B but in the opposite direction.

At D we find that both increase, but not in equal proportions.

Under monometallism the level of each money will be affected to the full extent of its own increase, and the divergence between the two moneys will be to the full extent of the difference between the respective increases. But under bimetalism the respective increases will only affect the level of the combination to the extent of the mean between these increases.

At E we find that both decrease, but not in equal proportions.

The results are on the same lines as those at D, but in the opposite direction.

At F we have a very interesting position. One increases and the other decreases at the same rate.

Under monometallism the increase in the one will affect its level to the full extent of the increase, and the decrease in the other will affect its level to the full extent of the decrease, and the divergence between the two moneys will be equal to double the variations of each from the common level. But under bimetalism the increase in the one and the decrease in the other counterbalance each other, so that

the level of the combination remains absolutely unaltered.

At G we find almost the same result as at F. In this case one increases at a greater rate than the other decreases.

Under monometallism the increase of one affects its level to the full extent of the increase, and the decrease of the other likewise affects its level to the full extent of the decrease; and the extent of the divergence between the two moneys will be found by adding together the respective variations from the level. But under bimetallism the increase in the one will more than counterbalance the decrease in the other. Consequently, the net result will be an increase, which, by affecting both equally, will affect the level of the combination to only half of what remains after deducting the decrease in the one from the increase in the other.

And lastly, at H, one decreases at a greater rate than the other increases.

The results are on the same lines as those at G, but in the opposite direction.

By studying these various cases we gain a clear indication of what would result from a combination of the two moneys in regard to stability. It should be pointed out that the supposed changes in the two moneys, whether as regards increase or decrease, are, for the purpose of a diagram,

necessarily taken as being limited to certain definite degrees. But in point of fact, of course, we cannot fix any specific limit to the changes that may actually take place. And it is under the stress of the very great variations in the quantity of gold money and in the quantity of silver money that the advantages of bimetallism over monometallism tell with the greatest effect. For, under monometallism, these variations in the separate and distinct moneys produce their full effect in every case, and cause great disturbances in the relation between the gold money and the silver money of the world, whereas, under bimetallism, these variations no longer act upon two separate moneys, but upon what is, to all intents and purposes, two forms or parts of only one money; and they, therefore, allow of much less variation in the level of the combination, while at the same time the relation between these two forms is free from any disturbance whatever.

Note particularly how under monometal-

lism, in the case F', the variations produce very great alterations in the level of each money, and very great disturbances in the relation between the two moneys; whereas under bimetallism the variations completely neutralise each other, with the result that there is not only an absence of any disturbance whatever in the relation between these two forms of money, but an entire absence of any alteration of the general level. In G and H the result is almost as striking, for the variations which, under monometallism, are so great are all but neutralised under bimetallism.

The diagram shows that among the eight conditions there are two in which one of the metals remains stationary, and four in which one of them moves at a greater rate than the other. On this ground it may be asked—are there not six conditions out of the eight in which one of the metals might possibly provide us with a more stable money than we could get by the use of the two? Given two

separate moneys one of which is moving, for a time at a greater rate than the other from the given level, it can, of course, be truly said that, for such time, one is more stable than the other. But this is no argument in favour of the general stability of either of the two metals taken singly. Later on the positions may be reversed, and the metal which was rising or falling may now be stable. But even supposing one of the moneys when taken separately to be actually slightly more stable than the other, we are still met by the question—Which of the two will it be? The very uncertainty as to what will be the relative positions of the two metals at any given time, and the impossibility of knowing beforehand which of them will remain stable, and which will move up or down, afford ample evidence that no real monetary stability can be hoped for under such conditions. And even if it were possible to arrive at any satisfactory conclusion on these points we should only have settled the question of stability for

that one metal, and thus have determined which should be chosen if we were compelled to use one to the exclusion of the other. The above objection (p. 135), therefore, has no real force.

What we really want to know is whether gold and silver combined would provide a more stable money than either gold alone or silver alone. The history of the past serves as a guide to the probabilities of the future. Great fluctuations have undoubtedly taken place in the relative production of the two metals. As a rule, when the production of one has been falling off the production of the other has been increasing. But while these great fluctuations have been taking place in the case of each of the metals, the combined production has, of course, been steadier. Moreover, the uncertainties attending the production of the two metals are not the only causes of their fluctuations. Other influences are at work. Take, for instance, the case in which one nation elects to change its money, say, from silver to

Alternate
move-
ments to
the front
in the pro-
duction
of the
respective
metals.

gold, or from gold to silver. We have a familiar example of this in the action of Germany when she demonetised silver and adopted gold in its place. Now when a commodity which has long enjoyed a steady demand is thrown out of use, either by the caprice of fashion or for any other reason, its value is necessarily affected. Gold and silver are not exempted from the action of this law. When silver was discarded by Germany, and gold was adopted in its place, the demand for silver fell while the demand for gold rose, thereby greatly disturbing the relation between the two metals. We have further striking evidence of this in the effect of American legislation, in the effect of the closing of the Indian mints to free coinage, and in the effect of the Japanese adoption of the gold standard. These risings and fallings in the demand for the respective metals and in their production, under monometallism, point to the conclusion that, under bimetallism, the actual conditions

would oscillate about the position shown by the illustration F on the diagram, namely, that position in which the variations in one of the metals in one direction are counterbalanced by the variations in the other metal in the other direction, thus bringing about almost perfect stability.

So long as our present two moneys are not in co-operation with each other, but are in direct antagonism, the stability of our measure of value will never be assured. There must be one money (this is not to say one metal) if we are to secure a condition of satisfactory stability. And no practicable method of attaining this has been brought forward with such paramount claims for acceptance as that of International Bimetallism, or the union, on a footing of perfect equality, as regards free coinage and legal tender, of the two monetary metals which now, in their state of disunion, perturb and harass the commercial world.

CHAPTER XX.

QUANTITY OF MONEY AND PRICES.

Existence
of a fairly
well de-
fined rela-
tion be-
tween the
quantity
of money
and prices.

ALTHOUGH many influences are at work in the determination of prices, yet the quantity of money is the most important factor in the case. We must understand that what is meant by the quantity of money is the number of unit measures of value. Now these unit measures of value, as such, are simply and solely media of exchange. And it seems to follow inevitably that price is nothing but a relation between the quantity of unit measures of value actually employed in exchange and the quantity of commodities actually in the position of being exchanged for them. If the quantity of goods remains unaltered and the quantity of these unit measures increases prices will rise. It is,

consequently, quite conceivable that a condition of things might obtain in which higher prices would prevail even when at the same time there was an increase in the quantity of goods, for the increase in the quantity of monetary units might be proportionally greater.

We have, of course, to reckon with alterations in the conditions under which money and goods are brought into the field of exchange, and in the speed with which the money is circulated. For instance, longer credit and greater banking facilities, on the one hand, and improved methods of production and distribution, on the other hand, have a great deal to do with bringing about alterations in prices, quite apart from any alteration in the quantity of money. With a given quantity of money and a given quantity of goods, either increased credit or increased banking facilities or increased speed in circulation will tend to increase prices, provided the methods of production and distribution remain as

The influence on prices of credit, banking facilities, &c.

before. Nor can it be denied that, with a given quantity of money, and with all other conditions remaining as before, any improvements of methods either in the production or in the distribution of goods will tend to reduce prices. It would be futile to attempt to ignore the force and effect of these conditions. But it still remains true that the "quantity-of-money factor" produces its own peculiar effect. And in cases where a variation in the quantity of money is at all appreciable the effect will be distinctly marked.

Money
the sun
around
which
commodi-
ties move.

The unique position which money holds makes it somewhat difficult to find a fitting illustration of this aspect of the question. The law of gravitation would perhaps afford us some valuable analogies, since we might without any undue strain on our imagination take money to be the sun around which commodities move in obedience to its influence. Let us, however, rather take the varying degrees of light and heat received by the earth from the sun. As we well

know, there are variations in the amount of heat and light received from the sun in proportion to its height above the horizon, and in winter as compared with summer. If now and again it happens, under particular conditions, that we receive more light and heat from the sun at other times of the day than at midday it does not follow that the sun is not exercising its full power at midday. The difference in effect is due to other causes—it may be to clouds, or rain, or mist, or wind. Again, because we sometimes have more warmth in the autumn than during certain days in summer, it does not follow that the colder summer days would not have been warmer had the same conditions prevailed as during the warmer days of autumn. Thus, while the light and heat from the sun under these varying conditions may seem to be acting with diminished effect, and the sun's power to be temporarily in abeyance, we must not suppose for a moment that the sun ever ceases to exercise its full

power. So, in like manner, it may be said with regard to money that conditions will arise from time to time which may seem to diminish and even to counteract its influence, but, like the sun, money will always maintain its power and ascendancy in its own particular sphere of operations.

Perhaps another idea may help to bring out this point more clearly, and to satisfy us that there must be a fairly well defined relation between the quantity of money and prices. Suppose, for example, that gold became as plentiful and as easily acquired as iron, and that a gold pound was still formed out of the same weight of gold as it now is, would not prices as measured in gold pounds be materially increased, and probably to about the same extent as they would be if measured in small pieces of iron of the same weight as a gold pound? On the other hand, suppose that gold became as scarce as diamonds, and that the weight of a gold pound was still 123 grains, would not prices as measured in gold pounds be

reduced to about the same extent as if they were to be measured in small heaps of diamonds each weighing 123 grains ?

It should be remembered that the quantity of our money pounds is far from being wholly made up of gold. Silver, as token money, helps very considerably, and even copper renders no little assistance in that respect. Consequently, the quantity of money is not identical with the quantity of gold pounds. And, therefore, what we mean (in England, at all events) by the quantity of money is the quantity of money pounds as made up by the combined use of gold, silver, copper, and fiduciary notes in accordance with our statutory regulations.

Lastly, we may note that those who believe that the quantity of money has little or nothing to do with determining prices, and who deny that the demonetisation of silver has been the cause of a fall in prices since 1873, are convicted of inconsistency when they resist the efforts

of the bimetallists on the ground, as they say, that bimetallism will largely augment the currency, and thus bring about a material increase in prices.

CHAPTER XXI.

MONEY DEAR TO BUY AND CHEAP TO BORROW.

SOME people are saying that money is scarcer and dearer—that it has appreciated—and that as a consequence the prices of commodities have fallen. Others tell us that money is more plentiful, and therefore cheaper—that it has depreciated—and that as a consequence the rate of interest is lower than formerly. These statements may seem hard to reconcile. That a thing can be scarce and dear to buy, and at the same time plentiful and cheap to borrow, seems paradoxical, if not contradictory. This certainly does not apply to such things as land, or houses, or horses, and it may be difficult to see how it can apply to

Distinction
between
money to
buy and
money to
borrow.

money. The contradiction is, however, only in appearance.

The money offered in exchange for other things is money properly so called, whereas what is borrowed is really capital. The two may look very much alike, but there is a rather wide distinction between them. We often come across such terms as "The money of the City" and "The money of the money market." Such expressions, however, denote capital expressed in terms of money and seeking investment. As between the borrower and the lender, inasmuch as the lender does not give up nor the borrower obtain absolute possession of the capital conventionally called money—that is to say, inasmuch as it does not pass between lender and borrower as a medium of exchange—it cannot be said to have properly performed the function of money in the transaction, and cannot, therefore, be properly called money at all. As between the lender and the borrower it is in a transition stage, and only performs the monetary function in the full

and proper sense when the man who has borrowed it uses it to pay for the commodities he requires—that is to say, when he obtains other things in exchange for it.

The distinction between money to buy and money to borrow comes out in other ways. The value of money on offer in exchange for other things is determined by the community as a whole. All of us buy money with commodities or labour. But how is it with the so-called money on offer to lend? Though there is always a considerable section of the community ready to borrow, only a small section are in a position to satisfy their desire, inasmuch as it is customary to demand security for loans, and security can only be offered by a limited number of persons. What may be the amount on offer to lend or what may be the amount of the effectual demand in borrowing at any given time depends largely on the particular state of trade prevailing at that time. But the effect of having to give security for these loans is also noteworthy. For, with a condition of falling

prices and a decrease in the market value of land and buildings there naturally comes a decrease in the number and amount of eligible securities. There is also a slackening of business enterprise, and many people who usually invest their money in the ordinary way of trade become more reluctant to do so. They prefer to employ it in the form of loans by depositing it in banks and lending it on good securities. This tends to increase the amount on offer in the money market, and thus, in connection with the employment of so-called money in the particular form of loans, the question of supply and effectual demand again crops up. For an increase in the supply of loans and a falling off in the effectual demand for them naturally leads to a decrease in the rate of interest.

Then, again, if money and that which is offered on loan were one and the same thing, the exchange value of money and the hire value of loans would necessarily rise and fall together, as is seen in the case of horses, houses, land, and so forth. We know, how-

ever, that the exchange value of money and the rate of interest for loans, save in very exceptional cases, move in contrary directions—when one rises the other falls.

Furthermore, if what is used as a medium of exchange and what is borrowed are to be considered as identically the same thing, it becomes impossible to explain the universally accepted truth that while the exchange value of money is the same to all alike, the rates of interest for loans differ to different people at one and the same time. Rich and poor alike can buy money in terms of commodities at the same rate, but they cannot obtain loans at the same rate of interest. Some people may borrow at two per cent., while others may have to pay ten per cent., and many cannot borrow at all.

Looking at the matter in still another aspect, it should be remembered that, whilst the buying of money and the buying of other things are both conducted on the same lines, there is a wide distinction between the borrowing of what is conventionally called

money and the borrowing of other things, for the operation of borrowing involves the returning of the thing borrowed. Now the paying back of a loan of money is not on all fours with the paying back of other kinds of loans, such as the loan of a plot of land, of a house, or a horse. In the case of a loan of money the borrower in using it must part with it absolutely, and obtain other things in exchange for it. Consequently, by the time that he is required to return it to the lender it may be worth more or less as measured by these other things so obtained; and thus the borrower—apart altogether from the payment of interest—may lose and the lender gain, or the borrower may gain and the lender lose, in consequence of a variation in the purchasing power of the loan between the time when it was obtained and the time when it has to be repaid. Thus, when the money increases in its general purchasing power the lender gains an unearned increment and the borrower suffers an undeserved loss. If the money decreases in general purchasing

power the positions are reversed. But in the case of the loan of a plot of land, or of a house, or of a horse, in using any one of these the borrower does not part with it in exchange for something else. And if, when the time comes round for the borrower to give up possession of the land, or the house, or the horse, it is worth more or less than when the contract was entered into, the difference in value—the gain or the loss—does not fall to him, but entirely to the owner, for the borrower has never parted with that which was originally lent, and simply returns it.

Lastly, in regard to the question of interest on borrowed capital, it does not follow that capital in the form of loans is in reality cheaper simply because the rate of interest is lower. For we must bear in mind that while the exchange value of money is reckoned in terms of commodities, the hire of loan capital is reckoned in terms of money. Loans of money are, therefore, unlike loans of land, houses, horses, and so forth, since in these latter cases the exchange value and the

Low rate
of interest
for loans
no proof of
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ness of
money.

hire value are both reckoned in money. And thus, although the rate of interest may be reduced, the capital is not really cheaper as a loan unless the fall in the rate of interest has been proportionally greater than the fall in the general prices of commodities. For instance, if, in order to pay the interest on a loan originally taken up at four per cent., we had twenty years ago to part with the same quantity of commodities as we have now to part with to pay three per cent., it is plain that our real payment as measured in commodities has remained unaltered in spite of the alteration in the rate of interest. There is, therefore, no ground for direct comparison between the rate of interest for loans and the relation between money and commodities. Whatever connection exists between them lies in the opposite direction to that which many persons imagine. For, when loan capital can be obtained at a lower rate of interest, this is only the natural outcome of the condition that money is dearer to buy in terms of commodities. In fact, the exchange value

of money and the rate of interest for loans tend, from the very nature of the case, to move in opposite directions. A low rate of interest is evidence that money as measured by commodities is scarce, and therefore dear,—a scarcity and dearness which are accentuated by the tendency, in a condition of falling prices, to use it in the form of loan capital rather than to part with it in exchange for commodities. A high rate of interest, on the contrary, is evidence that money as measured by commodities is plentiful, and therefore cheap—a plentifulness and cheapness which are accentuated by the tendency, in a condition of rising prices, to purchase property and embark in business rather than to lend on mortgage securities.

Instead, therefore, of a low rate of interest being evidence that money is plentiful and cheap, it is as a matter of fact valid evidence of its dearness, for it is the result of the scarcity of money for the efficient performance of its functions as a medium of exchange and standard measure of value.

CHAPTER XXII.

THE QUANTITY THEORY OF MONEY AND THE PRICE OF WHEAT.

The reduction in the price of wheat not altogether due to the increased quantity.

A CLEAR understanding of the relation between the quantity of money and the prices of commodities enables us to trace the cause of the undeniable general fall in the prices of commodities which we have experienced of late years. The arguments of certain monometallists here come to mind, and more especially the argument which treats of the low price of wheat. These monometallists contend that the production of wheat has enormously increased in recent years, and that this increase is, in itself, sufficient to account for the lower price irrespective of any change in the value of gold.

Their argument must stand the test, like every other similar case, of a reference to commodities in general, as explained on page 125. And here we might leave it. For we should find that although the increase in the quantity of wheat has undoubtedly had something to do with the fall in its price, yet the fall is not either primarily or mainly due to this cause. This wheat question has, however, a special aspect, to which it may be well briefly to call attention. The wheat has not all been produced in gold money countries. An impartial inquirer may reasonably ask—What would probably have been the effect on the production of wheat if the whole of the producers of it had been required to carry on their productive operations through the instrumentality of gold money only? If, as can be reasonably assumed, the increased production of wheat has been largely brought about through the instrumentality of silver money, then, whether we are satisfied that gold has increased in value or not, we may, at any rate, be satisfied

that silver money has been the better monetary instrument for the production of wheat

But even supposing it could be proved that there had been an increase in the production, not only of wheat but of all the various kinds of goods which have fallen in price in terms of gold, while gold itself had not varied from its old position either as regards quantity produced or cost of production, that increase, taken by itself, would not be sufficient to justify the conclusion that gold had not increased in value. We should have to apply the test of index numbers to gold as we did to wheat, in order to see whether it had maintained a given purchasing power over commodities in general. By this means we should see whether gold had kept pace with the movement of all other things taken collectively. It is all very well to take exception to index numbers on the ground that the fall or rise in the level might possibly be traced to a change in the quantity of the commodities themselves,

and not to a change in the quantity of money. Of course index numbers give us no information as to the cause or causes of a change in value. They merely register the fact. But since wheat,* as measured by general commodities, has been more steady than gold, we have proof that the great fall in the gold price of wheat—or, in other words, the great change in the relation between wheat and gold money—must have been due more to influences affecting the value of gold than to influences affecting the value of wheat.

* Wheat has fallen in relation to general commodities from 61 to 48, or about 21 per cent. Gold has risen in relation to general commodities from 61 to 100, or about 64 per cent.

CHAPTER XXIII.

BIMETALLISM AND FOREIGN COMPETITION.

Effect on
trade
of the
divergence
between
gold
money and
silver
money.

EVEN supposing, for argument's sake, that a bimetallic or two-metal money were no more stable than a one-metal money, it would still be worth while to persist in the agitation for the adoption of bimetal-
lism. For though stability of value is a very important quality in money, yet the divergence in the value of silver money from that of gold money is a source of harassing disturbance to traders, and brings about unfair competition and injustice between corresponding classes in different countries.

Those producers who do not produce for foreign markets and whose productions are not directly affected by the competition of

similar goods coming from abroad are apt to regard the proposals of the bimetallists with more or less indifference. The currency question is not brought home to such people so directly as it is to others. At the same time even they have to admit that in productive operations there is no alternative but to make calculations in the money of one's own country. For example, the sums which we pay for wages, materials, carriage, rent, rates and taxes, interest, and so forth must all be reckoned in the money of our own country. Now if what we produce is for sale in some country where the money is not the same as our own, but is continually falling in value as compared with ours—or, looked at from the other side, if our money is continually rising in value as compared with theirs—we are in an awkward position. In order to get the usual price for our goods we are compelled to ask our foreign customer a higher price—higher, that is to say, as reckoned in the money of his own

country. He naturally demurs to this, and offers the price he has previously paid. In the cases where there is native competition we are driven to accept his offer. This, of course, means a reduction to us—a reduction, that is to say, as reckoned in the money of our own country; the money in which all our expenses must be met. And even where such native competition does not exist, the higher prices which we are forced to ask involve greater difficulty in selling, with the consequence that the sales are fewer in number and less in amount. And, again, we are placed at a further disadvantage. Our own productions have to compete in our own markets with imported goods of a similar kind coming from countries where the money is falling in relation to ours, and where the costs of production, therefore, are also falling in relation to our costs of production. Consequently, these foreign producers can offer their goods at an unaltered price in terms of their money, and this, of course, means a

reduction of price in terms of our money. Thus it comes about that when international trade is conducted on the basis of two separate moneys the cheaper money tends to drive production out of the country in which the dearer money is used, and thus indirectly tends to drive the dearer money out of use, not only in its direct employment in productive operations, but in its investment in the form of loans. It is thus clear that those foreign farmers and manufacturers who are working with a money which is falling in relation to the money of our country have an advantage over us in competition.

But some argue that farmers and other producers who depend upon "profit" for their income by no means form the greatest number of the population. Some consideration must be had, it is pleaded, for those who obtain their income by other means—namely, rent receivers, interest receivers, wage earners, and so forth. And, as regards wage earners particularly, it is

urged that they will benefit by that competition which forces our farmers and manufacturers and others to lower their prices. This doctrine might be all very well if the competing goods were not the produce of *foreign* labour. But so long as, and to the extent to which, these conditions obtain, so much less labour is there for our wage earners, and so much less rent for the hire of land and buildings, and so much less interest for loans in this country. Our working classes, directly or indirectly, are deprived of the advantage which they might derive from producing the commodities which are now obtained from other countries. It has been well said by some one that to pay others for doing what one can easily and conveniently do one's self is one of the quickest roads to bankruptcy. And, of course, this applies to nations as well as to individuals.

We have only to imagine this doctrine of lower-priced imports carried far enough and we get not only a nation of unemployed,

but a nation drained of its capital by paying for foreign goods. In fact, unless there were a lowering of the wages of labour as reckoned in gold, or an increase of productive efficiency, such as would enable our producers to compete successfully with producers on a silver basis, the nation would be brought to the verge of bankruptcy as the necessary consequence of low prices due to unequal and unfair currency conditions. And thus, instead of lifting the coolie to the level of the British workman, the latter would be brought down to the level of the coolie.

It may be granted that the excess of imports over exports in the present position of England's trade shows that this state of affairs can to some extent prevail without any fear of bankruptcy. Our position is peculiar, however. In England's case there is a consideration to be taken into account which, so far as it goes, is separate and distinct from this competitive phase of the question, and which will apply under any system of currency. English capital is

British imports are largely affected by British capital invested abroad.

largely invested in foreign countries, and a very considerable portion of our imports comes as payment of the interest on capital which is invested abroad, or for its redemption. If this system of imports in payment of interest and for redemption were carried far enough we should become a nation living absolutely on foreign productions.

Bimetallism has a direct bearing even on this aspect of the question. We Englishmen expect to receive full interest on loans irrespective of any changes in the value of the currency. In our dealings with the East our failure to appreciate the true bearing of the divergence between silver and gold leads us to demand from India and other silver money countries the "pound of flesh" rather than the amount which would be due if we had full regard to justice and equity. And in this we err even from the point of view of self-interest. It is often a mistake to drive a hard bargain, or to be too literally exacting in the fulfilment of contracts. When the payment of a given amount of rent or of

interest involves the expenditure of much more labour, skill, and ability than was required at the time the agreement was entered into, it may be unwise on the part of the recipient of the rent or interest to insist upon full payment in accordance with the existing contract, or, in default thereof, the return of the loan or property. It may be better for him to modify the conditions and grant a fresh agreement. The stringent policy, if rigidly adhered to, may bring disaster all round. It is a policy akin to that of killing the bread-winner and real supporter of the family. It is all very well to demand from foreign governments the last penny of tribute either in money or in "money's worth," according to agreement. But, as a creditor nation, it is neither just to our debtors nor profitable to ourselves to force them, or to attempt to force them, to discharge their liabilities up to the hilt when to do so is much more onerous to the debtor than at the time when the debt was contracted.

Although the special case of England is a matter for careful consideration in so far as England is peculiar in having large foreign investments, it clearly does not touch our main argument. We are now dealing with conditions which affect the common good. What mainly concerns us is whether the two metals, yoked together, would provide us with a money which would be an improvement upon our present money for international purposes—that is, a money which would enable this country to conduct the interchange of services and goods with other countries upon more equitable and mutually satisfactory terms than is now possible. There can be no doubt that a bimetallic money would assist in this direction, and would help us to arrive more nearly at that economic goal which Cobden once described as “the division of labour by which the productive forces of the whole earth are brought into mutual co-operation.”

Low prices
not neces-
sarily an
advantage.

It does not, of course, necessarily follow that the only cause of low prices is foreign

competition. Even if there were no foreign competition, and England, for example, were isolated entirely from other nations, a comparative falling off in the quantity of the money of the country would have the effect of reducing prices. And low prices, resulting from a contraction of the currency, are undesirable and injurious. For a contraction of the currency benefits the owners of money at the expense of the owners of other kinds of property and at the expense of the producing classes generally. The many are fleeced for the advantage of the few. Low prices benefit consumers, as such, in so far as they are merely consumers. But producers, as such, are injured. The mass of the people are both producers and consumers. The consumers who do not produce are the fortunate few, who benefit at the expense of the rest. Again, if the result of low prices is that people are out of work or on short time on account of a slackness of trade, low prices cannot be an unmixed benefit. Nor are low prices any advantage to the work-

man if his wages have to be correspondingly reduced in order that his employer may keep him in full work. When wheat was twopence a bushel and sheep were sold at fourpence each the mass of the people of this country were much worse off than now, for the reason that money was extremely scarce and that the wages paid were correspondingly low. Large fowls at sixpence each are all very well for some people, but to those who have not got, and cannot get, the needful sixpence they are very dear. Nor will the producer get fat on the trade that he will drive under such a condition of things.

CHAPTER XXIV.

BIMETALLISM AND FREE TRADE.

It has been shown that there cannot be fair competition and equal liberty between the two money metals unless bimetallism is established. It is, however, repeatedly asserted that bimetallism is protection in disguise. On the contrary, it can be proved that bimetallists are the truest friends of a general free trade policy. For they hold that natural conditions and geographical position ought to have, and as a matter of fact will always have, their influence upon the trade of different countries. It is no part of the bimetallic plan to attempt to deprive any country of any of its natural advantages, but rather to increase them. And bimetallists maintain that there can-

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guise.

not be real free trade between any two countries so long as their industrial operations are not conducted on the same monetary basis. Indeed, countries cannot fairly compete with one another without this condition. But with the establishment of bimetallism free trade will have full play, not only as between gold and silver for money but, as between all those commodities the production, distribution, and exchange of which are largely regulated by the use of these metals as the measure of their value.

But it will be asked whether it is not expected that bimetallism, like protection, would bring about higher prices and increased profits in trade through the lessening of the force of competition from silver money countries. If that were really the aim of the bimetallists it might be said with some degree of truth that the protective spirit was at the root of the bimetallic movement. It is true that some people support the movement with this object.

But it is lower prices which bimetallists as a body welcome, and not higher prices, provided only such lower prices are brought about by natural, as opposed to artificial, conditions and not by sinister influences. Their aim is to put a stop to the contraction of the world's currency, and by so doing to arrest the appreciation of gold, together with the deadening effects of such appreciation on industrial enterprise. They desire to remove a very subtle and unnoticed cause of depression in trade, to have one measure of value for all countries trading together or having financial transactions with one another, and to unite the Eastern and Western nations by a bond of more equal exchange conditions and greater commercial harmony than at present exists. For, by the adoption of different systems of money in different parts of the world, there has been set up a barrier to mutual exchange and interchange between nations which is as harassing and vexatious in international trade as the adoption of different systems

Different systems of money a barrier to trade.

of money in London and Manchester would be in the trade between these two places. It cannot in fairness be said that the bi-metallists are seeking to protect silver and silver money countries at the expense of gold and gold money countries. They wish to treat all alike.

If there is any one thing that has helped more than another to undo the work which Cobden, Bright, and others urged on so enthusiastically it is the breaking up of the ratio of exchange between gold and silver as it existed at that time. If a tradesman in this country were to make a public announcement that silver would not be received in payment of any purchases at his establishment, would it not have the effect of deterring many from trading with him? So it is with traders in different countries having different moneys. Under such conditions trade must inevitably be hindered.

In fact, so far from the adoption of bimetallism being protection in disguise, it

is the absence of bimetallism which rather tends to foster movements for the imposition of protective duties. For what are these but fitful expedients for counteracting the advantages which some countries have over others by reason of their having different and diverging measures of value? There is nothing, then, in the bimetallic system which in any way clashes with Cobden's definition of free trade (p. 168). The bimetallic system is rather one of the most powerful instruments for abolishing those conditions which lead to protection and to schemes aiming at a purely artificial defence of certain branches of industry in one country against the rivalry of similar branches in other countries.

If bimetallism be protective, monometallism must be still more so. For bimetallists at any rate give two metals a chance, whereas monometallists give a chance to one only. And, further, this undisguised protection of the one metal, to the disadvantage of the other, diminishes

the volume of money. It contracts the currency, and thereby protects the leisured people at the expense of the whole of the industrial classes, discourages productive enterprise, robs labour of employment, and fosters conflicts between labour and capital.

In short, international free trade is out of the question unless we have international money. And there does not appear to be any practicable method of establishing an international money except by the institution of bimetallism. For free and open mints and unlimited legal tender for both of the money metals are the natural and necessary complement to free trade.

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Furthermore, the facts of history are on the side of the bimetallists. Those who insinuate that bimetallism is protection in disguise should remember that, by virtue of the existence of bimetallism in France and the other countries of the Latin Union, the system was practically in operation in this country at the time when a free trade policy was first adopted. They should also remember

that it continued contemporaneously with the free trade policy until 1873. How a return to that system can now be twisted into a protective policy does not admit of either an ordinary common sense or a truly scientific explanation.

On the whole, the refusal to allow silver the right of open mints and free coinage on the same footing as gold is doing more to hamper and restrict commerce than all the protective duties in existence. And this one-metal policy, by making it more difficult for gold money countries and silver money countries to trade together, is tending to infuse a spirit of enmity, rather than one of peace and amity, into the industrial relations between the nations of the world.

CHAPTER XXV.

A UNIVERSAL GOLD MONEY POLICY.

A gold
money
policy
simple
but not
efficient.

IT must be abundantly apparent that it is not a desirable condition of affairs to have gold money in one half of the world and silver money in the other half, each money working independently of the other. But supposing that all nations were to adopt gold for their measure of value, we have to consider whether any advantage would be gained.

It may at once be granted that a one-metal money would simplify matters as regards the passing of money between nations. We should thus get rid of the fluctuations in exchange. This one-metal money might also be more simple in use in the sense that it is more "simple" to eat one's dinner with

a knife or with a fork alone than with the two together. But what about the efficiency of its working? It has been suggested that if the industrial world could come to a stop and begin afresh, a gold money might then be made to suffice by starting with a much lower level of prices all round. But even with such an impossible condition as a fresh start it would be unwise to set up a universal gold money. For gold is quite unfitted for general use in the East. And, apart from this, even if at any given time the level of prices could be adjusted all over the world to the quantity of gold then appropriated for money, history justifies the contention that the future production of gold would not suffice to keep prices up to that level. In fact, one of the strong points with the bimetallists is that, judging from experience, both metals are needed to prevent a contraction in the currency. What, then, could we expect if we were to throw ourselves upon the supply of gold alone for the currency of the whole world? While granting

that an international one-metal money would simplify matters in some respects, we should inevitably find that if a universal gold money policy were adopted the evils attending an appreciating currency would be much intensified.

CHAPTER XXVI.

BRITISH PROSPERITY NOT DUE TO GOLD STANDARD.

PERSONS occupying positions of great trust and responsibility have asserted that the gold standard is in a large measure the cause of England's prosperity.

It has already been pointed out that this was one reason why Germany adopted a gold standard. Germany believed she would, by so doing, be better able to follow in the wake of England's prosperity. But when we examine the matter we find that this belief does not rest on a sure foundation. England was prosperous, as compared with other countries, long before she adopted the gold standard in 1816. It is not a currency of any particular metal, but a currency which

England
prosperous
before
1816.

Prosperity
helped by
expanding
currency.

can expand as necessity requires—a currency which can keep pace steadily with production and population—which has a stimulating effect upon the prosperity of any nation. On the other hand, a contracting currency and stagnation of trade stand to a certain extent in the relation of cause and effect. In support of this view as to the beneficial effects of an expansion of the currency, we need only to be reminded of the effects produced by the influx of gold arising from the discoveries of the great goldfields of California and Australia about the end of the first half of this century, and by the consequent increase in the money of our country. At that time England's trade increased by leaps and bounds. This prosperity was not, however, confined to England, for countries working on a bimetallic standard—that is to say, with their mints open to both gold and silver—also shared in it. A study of the general conditions obtaining at that period shows that those results were due, not to the gold considered as gold, but, to the expansion of

the currency. If England had been on a silver standard an equivalent increase in her money brought about by new discoveries of silver would have had the same result. In any case it must not be forgotten that, although the gold standard was adopted in 1816, yet, owing to the influences exerted by those nations which remained on a bi-metallic footing until 1873, the bad effects of this act of the Legislature were fortunately not fully experienced until after 1873.

It is thus not so much a question of metal as of money. It would be safe to say, on the one hand, that, during the period from 1816 to the time when the influx of gold from Australia and California began, the bimetallism of France prevented gold from fluctuating and appreciating as much as it would otherwise have done, and that, in consequence, prices were less disturbed than would otherwise have been the case. On the other hand, had bimetallism not existed in France during the time of this enormous influx, gold money would

probably have depreciated more, and gold prices have risen more, than was actually the case.

Condition
of trade in
late years
under a
gold
standard.

Let us further glance at the conditions since 1873. If the prosperity of this country be so closely bound up with the gold standard the opportunity has been quite ripe for the manifestation of its power and influence since that time. What have been the results? Is there any single country under a gold standard which has shown any marked tendency during the years succeeding 1873 in the direction of that prosperity which we are told is so intimately associated with the possession of the gold standard? Have not commissions been appointed from time to time since 1873 for the purpose, direct or indirect, of inquiring into the causes of the depression in trade? Even when there has been a slight revival can it be said to have been due to the action of the gold standard? If, for example, we take the slight revival of trade in 1890, shall we not find that it was largely due

to the circumstances connected with the passing of the American Silver Purchase Act, which increased the quantity of money in America, and seemed to foreshadow the adoption of bimetallism? Was the closing of the Indian mints to silver in 1893, with the object of introducing a gold standard, favourable to the prosperity of India? Has England herself proved to be any exception to this general state of affairs? Is it not a fact that, although we may appear to have prospered to some extent, there is scarcely a staple trade in this country which can be said to be in a satisfactory condition? Prosperity, to be real and permanent, must have its roots among the producing classes of a country, and productive industries cannot thrive under a condition of continually falling prices. "It does not need a Solomon" to understand the bearing of these facts.

Bad as all this is, things would have been much worse had it not been for other factors. Although there can be no

Chief
factors of
prosperity.

doubt that the trade of a country is either beneficially or adversely affected by its monetary standard, the main sources of prosperity must be looked for in other directions. The money of a country is the instrument by which it carries on its trade, and may, therefore, be compared to a tool in the hands of a workman. A skilful workman will often produce better results with indifferent tools than a less competent workman with the best of tools. So far as England is concerned, we know that her prosperity has been built up on foundations quite distinct from her monetary standard. These foundations were the energy, enterprise, temperament, integrity, and keen mercantile instincts of her people, and the dauntless courage of her mariners which has gained for her the empire of the seas. These characteristics of the English race have been backed up by such natural advantages as the excellent harbours of the country, its geological formation, teeming with mineral wealth of enormous

extent, and the presence of that silver streak which secures her against sudden invasion. And to these advantages must be added a long period of uninterrupted peace at home and of comparative immunity from entanglement with the squabbles of her neighbours, together with the personal freedom and the security in the possession of property which her people have so long enjoyed. These are sufficient causes to account for the fact that England has prospered, not in consequence of, but, in spite of the gold standard.

CHAPTER XXVII.

THE QUESTION OF THE RATIO.

It must be at once admitted that the work of determining what should be the particular ratio between gold and silver is one of practical difficulty. So many conditions claim to be satisfied, and the approval of the great nations has to be gained. But practical difficulties are only what we always expect in any arrangements of an international character. And surely the fixing of a ratio between the world's two money metals for the purpose of international money should not present greater difficulties than other international matters which come up for settlement from time to time, and which in many cases seem to threaten nothing less than an outbreak of hostilities.

Now, although bimetallists are not committed to, and do not associate their movement with, any particular ratio, it cannot be said of them that they have not any plan for determining what the ratio should be. Their scheme can be explained in a very few words. They maintain that, inasmuch as their aim is to provide a money for international purposes by the use of the two money metals at a fixed ratio, this money, and necessarily the ratio between the two metals forming it, can be properly established only by international agreement as the outcome of international negotiations.

Bimetal-
lists not
committed
to any
particular
ratio.

The main difficulty in settling this matter arises, of course, from the great difference between the market rate at the present time and the ratio of $15\frac{1}{2}$ to 1 which obtained for so long a period previous to 1873. This difference has developed conditions which have led some persons to argue that the way is now blocked for a return to the old legal ratio, or for the satisfactory fixing of a new one. Many people view with alarm the

fixing of the ratio at either $15\frac{1}{2}$ to 1 or at the present market rate of, say, about 31 to 1. In the case of $15\frac{1}{2}$ to 1, they seem to fear that this ratio would lower the value of gold and raise the value of silver to such an extent that there would be a great rise in prices in what are now gold money countries, and a great fall in prices in what are now silver money countries. They argue, therefore, that such a ratio would be very startling in the industrial world, and that it would be anything but a "natural" ratio.

There can, however, be little doubt that were silver again restored to its rightful position as a monetary metal, and allowed to do the work of money with the liberty and freedom that we accord to gold, the old ratio of $15\frac{1}{2}$ to 1 is not far wide of that which these natural conditions would call for.

Argu-
ments for
a ratio of
 $15\frac{1}{2}$ to 1.

The arguments which seem to be most cogent and striking in support of this ratio are as follows :—

(1) The ratio stood at $15\frac{1}{2}$ to 1 at the

beginning of the great influx of gold which took place during the 'fifties and 'sixties.

(2) This great influx did not alter the ratio.

(3) The world's entire stock of gold and silver money stood at this ratio of $15\frac{1}{2}$ to 1 so recently as 1873.

(4) The quantity added to this stock since 1873 is only a small part of the entire stock.

(5) The average ratio of the production of the two metals since 1873 has not exceeded 18 of silver to 1 of gold.

(6) The ratio of production for the 44 years from 1851 to 1894 works out to between 11 and 12 of silver to 1 of gold. Now the ratio of production for the first half of this century was 27 to 1. So that if ratio of production has much to do with determining the ratio of value of the monetary metals, as some monometallists seem to think it has, the fixing of a $15\frac{1}{2}$ to 1 ratio to-day would certainly not unjustly favour silver. In any case there is the fact that under a production ratio of 27 to 1 a

monetary ratio of $15\frac{1}{2}$ to 1 was maintained and accepted as just. And if we go a little further back, and take the 50 years from 1781 to 1830, we have a production ratio of 46 to 1. On what possible grounds then—grounds, at any rate, having any basis in reason—can it be argued that a monetary ratio of $15\frac{1}{2}$ to 1 could not have been maintained under a production ratio of between 11 and 12 to 1, or that a $15\frac{1}{2}$ to 1 monetary ratio could not now be maintained when the production ratio is about 18 to 1?

(7) Notwithstanding the large influx of gold and the comparatively small production of silver in the 'fifties and 'sixties, the legal ratio of $15\frac{1}{2}$ to 1 maintained itself without attracting notice.

(8) There is a very large quantity of silver token money now in use at, and very nearly at, $15\frac{1}{2}$ to 1.

(9) All the silver coined to-day in gold money countries is still coined at, or very nearly at, $15\frac{1}{2}$ to 1 of gold.

(10) Even the expectation of free coinage,

on the occasion of the passing of so small a political measure as the Sherman Act of the United States, was the means of bringing the ratio of value for the whole world to between 17 and 18 to 1 so recently as the autumn of 1890.

On the other hand, the adoption of a 31 to 1 ratio is objected to chiefly on two grounds, namely :—

(a) That the very large quantity of silver in use as token money at about $15\frac{1}{2}$ to 1 in what are now gold money countries is a very important factor with which we should have to reckon.

(b) Inasmuch as the price of silver in terms of gold was never cheaper than 16 to 1 until after the time when silver was deposed from its position as a standard monetary metal in Europe, the ratio of 31 to 1 would unjustly favour gold, and would have a damaging effect upon the production of silver in time to come, thus leading to an inadequate supply of the money metals hereafter.

Whether a $15\frac{1}{2}$ to 1 ratio is "natural" in the strict sense or not, it may be said that since money, as such, is essentially the outcome of human convention and a creature of law, any ratio which might be actually agreed upon by even a small number of nations might with perfect truth be said to be the natural outcome of the conditions then prevailing. Either of the ratios mentioned would be a distinct improvement on present conditions.

It would, indeed, be useless to contend that there would be no effect whatever on prices if all the silver which is in the form of money in silver money countries, and all the gold which is in the form of money in gold money countries, were altered in their relation to one another in such a way that instead of a market rate of 31 to 1 there would be a legal ratio of $15\frac{1}{2}$ to 1. But, granting that there would be some effect on prices, it does not follow that this effect would be very noticeable. And, as a matter of fact, if any reasonable ratio be adopted,

the resultant evils would be less numerous and less serious than those people imagine who take a partial view of the position. Things would right themselves speedily, and the check on the peaceful progress of the world's trade would be but temporary, and would soon be forgotten in the permanent benefits which would arise.

CHAPTER XXVIII.

A $15\frac{1}{2}$ TO 1 RATIO AND HOME TRADE.

IN discussing the effect which a $15\frac{1}{2}$ to 1 ratio would have on prices, let us in the first place look at the matter as it would affect national or internal trade, and, for the moment, throw altogether aside the consideration of the influence which such a ratio would have upon international trade. The consideration of international trade can then be treated in its turn, and with greater clearness.

In what follows it must be remembered that, under bimetallic conditions, silver and gold would alike be *legal tender*, if not in all countries, at any rate in those nations which were parties to the agreement. This legal tender power would determine, as is admitted

on all hands, the relation between gold and silver for all the world. Again, bimetallism does not involve doing away with any of the national standard coins or price denominators. The English pound, the American dollar, the French franc, the Indian rupee, and so forth would continue to be the pricing instruments in their respective countries just as they have hitherto been.

Now prices are determined in the long run by the ratio between the number of pricing instruments and the things which they have to price, or, as this idea is usually expressed, by the ratio between the quantity of money on offer for exchange and the things offered in exchange. It follows from this that the main problem for us here is to estimate what would be the effect on the actual number of these national price denominators if we adopted the $15\frac{1}{2}$ to 1 ratio.

In thus trying to simplify the conditions, due regard must, of course, be had to the influence exerted by credit and speculation. But however far people may go in

The influence on prices of credit and speculation.

speculating and in giving credit, the day of settlement must ultimately come. In every case the quantity of money actually paid must finally be brought into direct relation with the quantity of commodities which have changed hands.

Effect of a
 $15\frac{1}{2}$ to 1
ratio on
prices in
gold
money
countries.

Now, under bimetallic conditions, these pounds, dollars, francs, or other price denominators founded on gold could only increase in number as compared with commodities in their respective countries if the new production of the two metals, and the quantity of them already in supply, allowed of such an increase. And inasmuch as, under the monometallism which has prevailed since 1873, prices have not increased in silver money countries, and have fallen very considerably in gold money countries, there can be little doubt that a much larger quantity of money than has been at our command would have been required for securing a condition of steady prices all round. There are, therefore, ample grounds for the belief that, even had silver not been deposed in

Europe and America, but had been allowed free coinage, the two metals would still have barely sufficed to prevent prices from falling. But whether bimetallism would have maintained prices at the level of 1873 or not, we must not jump to the conclusion that to re-establish bimetallism at the old ratio of $15\frac{1}{2}$ to 1 would bring the level of prices back to the level of 1873. For we have now to deal with things as we find them, and not as they would have been had different conditions prevailed. And, when we take our stand upon the quantity theory of money and prices, it is difficult to see how prices can now be increased at a greater rate than would correspond with the increase, if there were an increase, in the quantity of money. Such a ratio would not, of course, have any practical effect on the quantity of silver token money, inasmuch as it is already in use at, or nearly at, this ratio of $15\frac{1}{2}$ to 1. Moreover, we must not run away with the idea that the quantity of money is increased in proportion to the new production of the

Annual
produc-
tions of
gold and
silver
barely
sufficient
to main-
tain
present
general
prices.

money metals. Due regard must be had to the increase of money needed for the increase in population. We must also make allowance out of the new production, not only for wear and tear of the existing huge stock of money, but for those very large quantities of gold and silver which are used in the arts and crafts. So that, all things considered, it would seem not unreasonable to assume that, so far as internal trade is concerned, the new production of the two metals would hardly be more than would be needed to keep up the quantity of money necessary to maintain general prices at the present level.

Prices are not, of course, everything in our industrial affairs. There are other obvious considerations, such as rent, interest, existing contracts, wages, and so forth. But these are considerations which depend upon prices. And if it can be reasonably assumed that prices would not be perceptibly disturbed by any particular ratio, many objections against the adoption of that ratio disappear.

Attention should also be directed to a further point. To alter the existing market ratio between the two metals, and then at once to bring them together in a sort of yoked pair or partnership so as to form one money, would not by any means have the same effect on prices as would a similar alteration in the ratio between the two metals, brought about by an abnormal and marked increase in the production of gold, or by a cessation of, or great diminution in, the production of silver. For example, if, under existing monometallic conditions, a $15\frac{1}{2}$ to 1 ratio were to be quickly brought about by an immense find of gold, then prices in gold money countries would rise, and the effect on prices in silver money countries would be hardly perceptible. For the gold would be of no use as money in silver money countries, and therefore would not flow into them. Consequently the number of price denominators as compared with commodities would remain unaltered in silver money countries. Again, if this ratio were to be

Effect of an alteration of the ratio under bi-metallism and under mono-metallism.

quickly brought about by a cessation of the production of silver and an annihilation of a large quantity of that metal, prices in silver money countries would rapidly fall, while the effect on prices in gold money countries, by similar reasoning, would also be hardly perceptible.

If, however, the same ratio were to be suddenly brought about by an agreement between a number of nations without there being, at the same time, any alteration in the quantity of the pricing instruments in the respective countries, no *sudden* or *considerable* disturbance in prices could necessarily follow.

Having cleared out of the way any idea of a *sudden* disturbance of prices, it remains to go further afield, and to attempt to estimate the after effects on prices and trade generally. The view here advanced is that the result of fixing this ratio of $15\frac{1}{2}$ to 1 would be, not so much an increase in general prices as, an avoidance of that condition of falling prices which arises from a scarcity

A means of avoiding an unnatural condition of continually falling prices.

of money. Not that low prices are necessarily objectionable. They are not objectionable when they are the outcome of improved methods in production and distribution; though even in that case the fixed income class derive an unearned benefit. The really objectionable feature comes in when we have a condition of affairs in which prices are *continually* falling as a result of the contraction of the currency. It is this condition in the commercial world which is so depressing, so damaging and discouraging to enterprise, and so great a hindrance to the progress of trade and industry.

Let us now look at the matter as it would affect the home trade of those countries which are at present on a silver basis. The question may be asked—Is it not clear that to increase the *price* of silver in terms of gold is equivalent to increasing the *value* of silver to the same extent? And would it not, therefore, appear that the establishment of a 15½ to 1 ratio would be ultimately followed by a great fall of prices

Effect of a rise in the gold price of silver on prices in Eastern countries.

in those countries which are now on a silver money basis?

This question must be answered in the negative. For, in the first place, it is a mistake to think that to increase the price of silver in terms of gold is equivalent to increasing the value of silver to the same extent. The distinction between price and value has already been explained (Chap. XVIII.), and it is not necessary to go over the same ground again. Suffice it to say here that it no more follows that the general purchasing power of silver would be increased than that the general purchasing power of gold would be reduced. In the second place, we must not forget that the conditions of Eastern countries are so peculiar as compared with our own that for some time to come they would, so far at any rate as their internal trade is concerned, be little affected by any change of ratio between the two metals. The silver monetary idol is worshipped by them just as much as the gold monetary idol is worshipped by

us. This fact is often lost sight of. A blind faith in the absolute stability of gold leads people in this country to believe that when there is a change in the ratio between silver and gold it is always the silver which is the unstable thing. On the other hand, in silver money countries it is the gold which is considered to be the unstable thing. For example, let us place ourselves in the position of a person in India—that is, of one who always expresses prices in terms of rupees, and who looks upon gold as a commodity only. If the ratio between silver and gold were to be suddenly changed we should at once conclude that it was the price of the gold, and not the value of the silver, which had changed. That is to say, we should regard the alteration as meaning that it now required a greater or less number of foreign gold coins than before to equal the value of a given number of rupees.

We need not, however, imagine ourselves in India to understand this aspect of the

question. For we know that the ratio between silver and gold has varied very considerably since the time when silver was deposed from full monetary power in Europe, and that, notwithstanding this, the value or general purchasing power of silver in silver money countries has remained fairly steady. We can, therefore, see that by a change in the ratio there would not be brought about any corresponding change in the views of those countries which are now on a silver basis. For they would not regard silver as having risen in value, but would regard gold as having fallen.

Moreover, it must not be overlooked that to raise silver in relation to gold by international edict would tend in the direction of encouraging the production of silver and of getting more of it to the mints of Eastern countries, either directly or indirectly, in exchange for other things, and by means of the flow of capital. Consequently the quantity of rupees and other price denominators in those countries which are now

on a silver basis would be increased rather than reduced. Thus, considering the matter apart from the influence of international trade, instead of there being cause for apprehending a fall in the general body of prices in silver money countries, there is reason to believe that the tendency would be in the direction of a rise in rupee prices, or in prices as reckoned in terms of any other Eastern pricing instrument.

CHAPTER XXIX.

A $15\frac{1}{2}$ TO 1 RATIO AND INTERNATIONAL TRADE.

THUS far we have been dealing with the question solely from a national or internal point of view. The international aspect must now be considered.

It has already been shown that the fall in silver in terms of gold has given producers on a silver basis an advantage in competition with producers on a gold basis, and that this has taken place because the silver money countries can offer commodities in gold money countries at the same silver price as before, thus compelling gold money traders to reduce their prices. It may be asked—Would not this condition of affairs be reversed if silver were to rise in terms of gold, and, consequently, would not producers on a gold

money basis have an advantage in competition with producers on a silver money basis, inasmuch as the gold money countries could offer commodities in silver money countries at the same gold price as before, and thus compel the silver money traders to reduce their prices? On the other hand, looking at the matter from the point of view of imports from silver money countries into gold money countries, and assuming, for the sake of argument, that ten rupees instead of twenty were suddenly to become equal to our pound, and assuming also that the prices of commodities in India had not been disturbed in terms of rupees, it may be asked—can there be any doubt that the prices of these imports would be doubled in terms of our pounds? And would it not, therefore, appear that the competition of Eastern countries with England would be very much weakened, and that we should have to look forward to a rise in our own country in the prices of those commodities thus directly affected?

Home trade a larger factor than foreign trade in determining general prices.

These objections are not nearly so serious as they appear at first sight. We must not lose sight of the very important fact that although we cannot ignore the effect of foreign trade, yet the home trade as a whole far exceeds the foreign trade of a country, and of the two is the larger factor in determining general prices. At the same time it must be admitted that there would be new and complicated influences of greater or less moment at work on both sides, but the influences on the one side would probably be counteracted or balanced by the influences on the other.

Let us first of all deal with the assumption that prices would fall in silver money countries.

This assumption implies that because a fall in silver in relation to gold has forced gold prices down it necessarily follows that a fall in gold in relation to silver will force silver prices down. But this is assuming that the economic conditions of Eastern countries and the characteristics of the

people are on all fours with those of the United Kingdom and its people. We must not argue that, because certain causes have produced certain effects in this country, therefore the same causes will produce precisely the same effects in the East. The Orientals are not quite so much given to higgling as the people of the West. They are more inert, their markets are more sluggish, their purchases to suit their individual requirements are comparatively small, and their means of distribution are less highly organised than ours. Consequently, they are less accustomed to variations in prices than we are, and are generally satisfied if they are able to get the goods they require at the old prices.

Moreover, seeing that the international demonetisation of silver has had very little effect on prices in silver money countries, how can it be assumed that it will be otherwise in those same countries if it is internationally remonetised? And even if there should be any noticeable effect surely it

would be more reasonable to assume that, inasmuch as remonetisation would help the flow of silver into India, prices would tend to increase rather than to fall.

With regard to the assumption that prices would rise in gold money countries from the restoration of the $15\frac{1}{2}$ to 1 ratio, and the consequent alteration in the conditions of Eastern competition, it is obvious that inasmuch as the production and distribution of commodities in all countries would be conducted on the same monetary basis—by means of monetary units of different names, but having a fixed relation to one another—no country could gain at the expense of another by reason of their having different monetary standards.

Moreover, we must not forget that the fall of prices in gold money countries of late years has not been due to Eastern competition in the main. A greater factor has been the enhanced value of our gold money arising from the stoppage of the free coinage of silver in Europe and America in 1873.

The effect of this stoppage has been to check the growth of the volume of currency in the world, and it is the gold standard countries which have felt it the most. The effect of the restoration would be to allow of a steady growth in the volume of the currency such as is required to keep pace with the increased needs arising from the growth of the population. The prevention of a further fall in prices is obviously quite a different thing to the bringing about of a rise in them. It should also be remembered that it is not quite so easy a matter to raise prices in a country like England as it is to leave them as they are or to lower them. We know this from our daily experience, and thus we have very good grounds for believing that even with a sudden adoption of this ratio gold prices generally would rise very little or very slowly.

But even if we admit, for the sake of argument and in deference to those who believe that a serious disturbance of prices would result from the restoration of the

$15\frac{1}{2}$ to 1 ratio, there can be no doubt that most people would rather have a storm of short duration than interminable rough weather. And so long as the ratio between the two monetary metals remains unsettled the monetary weather will also remain unsettled, and the resulting harvest of trade and commerce will be unsatisfactory.

Furthermore, for the benefit of those people who cannot be shaken in their belief that the prices of imports from present silver money countries would increase, it may be pointed out by parity of argument that a corresponding advantage would accrue from the exports to those countries. For it necessarily follows that the exporters of goods to what are now silver money countries, in getting the same number of rupees, or other Eastern national standard money, as before, would be getting more pounds than they did previously. And thus they would be better able to compete successfully with the manufacturers of those countries which are now on a silver basis.

Lastly, supposing that prices did rise in this country as the direct effect of an establishment of a $15\frac{1}{2}$ to 1 ratio, or indirectly from that cause owing to a resulting improvement in trade, there is no reason to dread such a condition of affairs. The experience of the industrial and social world during the period of rising prices in the 'fifties and 'sixties certainly does not warrant any misgivings on that score.

Before we leave this international phase of the question the present indebtedness of silver money countries to gold money countries must be considered. There can be no doubt that were the old ratio of $15\frac{1}{2}$ to 1 to be restored, those countries which are now on a silver basis would derive a substantial advantage over present conditions in paying the interest on gold loans and in liquidating them. If, for example, 10 rupees would discharge the same liability that is now discharged by 16, and prices in terms of rupees remained as before, silver money countries would clearly gain some

The gold
indebted-
ness of
silver
money
countries.

advantage, and to some extent obtain relief from the present unjust condition of affairs. But in this matter of the payment of interest on gold loans and their liquidation by a less number of rupees than before, we must bear in mind that this less number of rupees would be equal to the former larger number in terms of gold. So that gold loan holders would not directly lose anything by a change in the ratio between silver and gold. They could only be indirectly injured in the event of a rise in the prices of commodities, and it is by no means clear that a rise would take place.

CHAPTER XXX.

A $15\frac{1}{2}$ TO 1 RATIO, SILVER MINING, AND STOCKS OF SILVER.

SOME of the most stubborn defenders of monometallism oppose bimetallism on the ground that a ratio of $15\frac{1}{2}$ to 1, or anything near it, would enable the owners of silver mines to make large profits. Indeed, in some cases, they have gone so far as to declare that it is these silver mine owners who are the backbone of the agitation.

The profits of silver mining.

This theory is an extraordinary one. If no demur is made to large profits being now and again obtained from the mining of gold, why should such an objection be raised in the case of silver? But, as a matter of fact, in the case of silver as of gold, although some mines may bring exceedingly good

returns, there is reason to believe that, taking into account the whole of the capital invested, the average profit, if indeed there has been any profit at all, is exceedingly small. Some authorities go so far as to say that upon the whole the cost of getting gold and silver has been about twice as much as the value of the output. In accordance with such a theory it might be argued that we must not perform any act which would benefit ourselves if it were at all likely to be of advantage to any one else.

The influence of existing stocks of silver.

There are also some monometallists who talk about the vast stocks of silver in America and France, and try to lead us to believe that if bimetallism were adopted these stocks would at once become an addition to the money of the world, thereby lowering its value and necessarily increasing prices. These objectors cannot see, or will not believe, that this silver, though not actually in circulation, is really doing the work of money quite as much as if it were passing from hand to hand among the

people. It is doing this work by means of paper representatives in the same way that the stock of gold in the Bank of England is practically in circulation through the medium of Bank of England notes, for the redemption of which the gold must be held in stock.

CHAPTER XXXI.

A 31 TO 1 RATIO.

A CLEAR understanding of the probable effect of fixing the ratio at the present market rate of about 31 to 1 is necessary for the justification of the arguments previously advanced in regard to a $15\frac{1}{2}$ to 1 ratio.

Our exist-
ing silver
token
money.

Some plan would have to be adopted for dealing with the silver token money now in use. It would not be well to interfere with all this silver token money at once. It would be better that it should be allowed to pass current for a time, at any rate, on its present footing. Any silver devoted to the monetary use at the new ratio of 31 to 1 might remain uncoined and be held by the banks, for some time to come, for international purposes.

Furthermore, it is hardly necessary to point out that, inasmuch as the adoption of the market rate for the time being would leave the existing ratio unaltered, no immediate disturbance in prices could possibly come from that source. Absolute freedom from uncertainty on that point is without doubt a weighty consideration. And as the establishment of some ratio is of the most vital importance, and as other minor factors would not be long in adjusting themselves to the ratio adopted, it would be better to accept such a ratio rather than to abide by the present unsatisfactory condition, with its everlasting risk of fluctuations in the exchanges between gold money and silver money countries, and with its consequent injurious effects on trade in all parts of the world. There is also the great risk, should bimetallism not be adopted, of other nations deciding for a gold standard, thus leading to a further contraction of the currency in gold money countries.

No immediate disturbance in prices.

But in saying this much in regard to a

Present
market
rate
unduly
favourable
to gold and
unfairly
disparag-
ing to
silver.

ratio of about 31 to 1 it will, of course, be understood that such a ratio is not here advocated as the best of all possible ratios. One great objection to it is that to which reference has already been specially made, viz., the vast amount of silver in use as token money at or about $15\frac{1}{2}$ of silver to 1 of gold. Another weighty objection is that, having regard to the historical ratios of between 14 and 16 to 1, which prevailed for 200 years prior to 1873, we have reasonable proof that a permanent ratio of 31 to 1 would be unduly favourable to gold and unfairly disparaging to silver. On this point we must, of course, make full allowance for the highly speculative spirit associated with the two money metals which has in the past had so great an influence upon their production. But a prospective large profit has been the cause of this speculation. No one produces things, not even gold and silver, for the fun of producing them, but for what they can get, or think they can get, out of them. Thus, whatever ratio

might be determined upon—or, in other words, whatever might be the respective purchasing powers of the two metals as the consequence of the ratio agreed upon—the ratio actually fixed would have a great deal to do with determining their future respective production. This is no light matter, but one which must be accorded its due place in any consideration of the maintenance of a fixed ratio.

CHAPTER XXXII.

CONCLUSIONS AS TO THE RATIO.

THE bimetallists aim at more than the prevention of fluctuations in exchange, important as that in itself alone undoubtedly is. They wish to provide a less variable pricing instrument. In other words, they desire to devise and construct a more stable common measure of value than those which we have at present in use. For attaining their object they think that every procurable ounce of both gold and silver will be needed. Consequently, it is considered very undesirable to determine upon a ratio which would materially discourage the production of silver. They would rather adopt one which, judging from the experience of the past, would let silver

have fair play in competition with gold. And, so far as experts are able to judge, the adoption of the old ratio of $15\frac{1}{2}$ to 1 would be attended with far less disturbance in prices than some people seem to apprehend, and attended also with far less difficulty than the adoption of the present market ratio of somewhere about, say, 31 to 1. This opinion is justified by the reasons already given in these pages, and by the general belief that the effect of an authoritative announcement that a congress of nations was about to be held for the purpose of settling the ratio would be such as to raise silver to a point at, or very nearly at, the old ratio of $15\frac{1}{2}$ to 1. It would do this on the same principle as applies to commodities in general. If, owing to some change of fashion, or possibly to some legislative interference in the shape of an increased duty or other fiscal change, the demand for any commodity falls off, it at once goes up again when there comes a favourable alteration in the fashion or

the law. Upon the whole, then, it would be better to have the old ratio. But if we could not get that, it would be advisable, and indeed wise, to accept the present market ratio. And it goes without saying that a willingness to accept either of them leaves us prepared to accept any of the possible intermediate ratios. But there is no desire to lay stress upon what is, after all, a merely personal view. As before stated, the particular ratio determined upon must ultimately be settled by international agreement. Still, the statement of a personal view may have its interest and value, by leading others to an understanding of some of the problems before us, and to hopefulness in regard to the possibility of their solution.

CHAPTER XXXIII.

CONCLUSION.

It may be well to pass briefly in review the main conclusions at which we have arrived in the course of this survey of the bimetallic position. Our first step was to recognize the exceptional nature of money and the unique and very important function which it performs. It is this unique position and function which renders reasonable and practicable the fixing of a relation between the value of gold and the value of silver.

In support of this view it was pointed out that, when things can be conveniently used as substitutes for one another, their relative cost of production is by no means the chief factor in determining their relative value. It was also proved that neither is the

quantity of the new supply the chief factor in determining the value of things ; that gold and silver are so nearly identical in their fitness for the purpose of money that they can be looked upon as practically perfect substitutes for each other ; and that they always have run, and still do run, together as a natural pair in fulfilling the monetary purpose.

As regards the two factors, Demand and Supply, Demand was shown to be the more important. For, in the economic sense, Demand implies the amount of money which has to be given for a thing, and money is the instrument of Demand. The demand for money, therefore, no matter of what substance or substances money may be formed, is stronger and more general than the demand for any other thing.

The commanding position which money occupies was next brought out in several ways. It was shown that the monetary use of gold and silver, based as it is on legislative action, causes these metals to be more

largely employed in the arts and crafts, in loans and hoards, than would otherwise be the case, and that upon this use the amount of their production was largely dependent. In fact, the monetary use was seen to be the cause of what is practically an unlimited and insatiable demand for the money metals. It was on these grounds that the monetary use, directly or indirectly, was taken to be the most potent factor in determining the value of gold and silver; and that the establishment and maintenance of a ratio between these metals for monetary purposes would thus necessarily establish and maintain the same ratio between them for all other purposes.

A full and impartial consideration of the causes for the breaking up of the ratio in France clearly demonstrated the fallacy of any argument being deduced from these causes against any attempt to restore a ratio, if the leading nations of the world combined in an attempt to do so.

The subject of protection was next dealt with. It was explained that to single out one substance for a special purpose, when another is equally fitted for the same purpose, was to create a monopoly, and to introduce an objectionable form of protection. On the other hand, the co-operation of the two metals under bimetallism, by allowing such a fair competition between them as can exist only with a legal ratio, would be founded on a basis far more natural than that upon which monometallism rests. For monometallists seek to remedy the deficiencies of their system by an arbitrary protection of one metal against the other, and by minting out of the rejected metal token coins of much higher circulating value than that of the metal of which they are composed.

It was also made quite plain that, under international bimetallism, "Gresham's Law" would be inoperative, inasmuch as the currency for the whole world would rest upon a common basis, and the relative value

of the two metals would be the same in all countries.

The importance of money, it was explained, lay in the fact that its functions as the authorized medium of exchange and statutory measure of value constituted it the common instrument for the determination of equity and the adjustment of rights, whether between individuals or classes. It was also shown that, inasmuch as silver is the more efficient for some kinds of monetary work, and gold the more efficient for other kinds of monetary work, additional conveniences would result from having the two metals at our service instead of being restricted to one of them.

The great mistake of confounding a fall in the *gold price* of silver with a fall in the *value* of silver was made manifest by drawing a clear distinction between price and value ; and it was also shown that there exists a fairly well defined relation between the quantity of money and prices. Among other difficulties resolved was that of the apparent

contradiction that money can be dear to buy and at the same time cheap to borrow.

The international aspect of the subject next presented itself. So long as the two present moneys of the world are not in co-operation with each other, but are, on the contrary, in direct antagonism, the stability of our measure of value can never be assured. All have to agree that the existing divergence in the values of the two moneys of the world is a source of harassing disturbance to traders, and that it has brought unfair competition and injustice between the corresponding classes in the different countries. As a remedy for this, it is contended that a bimetallic money would help us to arrive more nearly at that economic goal which Cobden once described as "the division of labour by which the productive forces of the whole world are brought into mutual co-operation."

Proceeding to deal with the monometallist objection that bimetallism implies protection in disguise, it was shown that it is mono-

metallism which tends to foster movements for the imposition of protective duties, and which now has the effect of contracting the currency, and thereby protecting a large number of moneyed and leisured people at the expense of the whole of the industrial classes. Productive enterprise is thus discouraged, labourers are robbed of employment and of their due reward, and conflicts are fostered between labour and capital.

Bimetallism, on the other hand, would provide us with a currency which would practically be able to keep pace steadily with production and population, and would thus have a stimulating effect upon the prosperity of all nations.

The fallacy that England's prosperity is due to the gold standard was exposed by establishing the fact that England enjoyed a large measure of prosperity before she adopted the gold standard; a prosperity which continued during the actual period that a fixed ratio was to all intents and purposes in existence.

With regard to the question as to what the ratio should be, reasons were advanced in favour of a return to the old ratio of $15\frac{1}{2}$ to 1, in preference to the adoption of the present market rate. The final settlement of the ratio was, however, deemed to be a matter for international agreement.

The main object in the foregoing pages has been to prove that the want of the age is a currency for the whole world which shall rest on a common monetary basis; and which shall be more stable in value than either the gold or the silver currencies at present in use. Bimetallism, and bimetallicism alone, internationally adopted, can supply this want.

APPENDIX.

MR. SAUERBECK'S INDEX NUMBERS (OR PERCENTAGES) OF PRICES.

THE Table of Index Numbers is based on the average prices of 45 descriptions of commodities during the 11 years 1867-1877, and the Index Numbers have been calculated in the ordinary arithmetical way; for instance, English wheat :—

Average, 1867-77	s. d. 54 6=100, average point.
„ 1855	74 8=137, or 37 per cent. above the average point.
„ 1896	26 2=48, or 52 per cent. below the average point.

The Index Numbers therefore represent simple percentages of the average point.

Averages of 1867-1877 = 100.

Year.	Index Number of 45 Descriptions of Commodities.	Index Number of Silver 100 = 60·84d.	Average Price of Silver.	Year.	Index Number of 45 Descriptions of Commodities.	Index Number of Silver 100 = 60·84d.	Average Price of Silver.
			d. per oz.				d. per oz.
1878	87	86·4	52 $\frac{9}{10}$	1888	70	70·4	42 $\frac{7}{8}$
1879	83	84·2	51 $\frac{1}{4}$	1889	72	70·2	42 $\frac{1}{10}$
1880	88	85·9	52 $\frac{1}{2}$	1890	72	78·4	47 $\frac{1}{10}$
1881	85	85·0	51 $\frac{1}{10}$	1891	72	74·1	45 $\frac{1}{10}$
1882	84	84·9	51 $\frac{1}{10}$	1892	68	65·4	39 $\frac{1}{10}$
1883	82	83·1	50 $\frac{9}{10}$	1893	68	58·6	35 $\frac{1}{10}$
1884	76	83·3	50 $\frac{1}{10}$	1894	63	47·6	28 $\frac{1}{10}$
1885	72	79·9	48 $\frac{1}{2}$	1895	62	49·1	29 $\frac{7}{10}$
1886	69	74·6	45 $\frac{3}{8}$	1896	61	50·5	30 $\frac{1}{2}$
1887	68	73·3	44 $\frac{1}{2}$				

COMMERCIAL RATIO OF SILVER TO GOLD FROM 1687 TO 1896.

THE figures from 1687 to 1832 are based upon the price of Silver in the Hamburg market, and from 1833 to 1896 upon the price in the London market.

From 1687 to 1832 the ratios are taken from Dr. A. Soetbeer; from 1833 to 1878 from Pixley and Abell's tables; and from 1879 to 1896 from daily cablegrams from London to the Bureau of the Mint.

Year.	Ratio.	Year.	Ratio.	Year.	Ratio.	Year.	Ratio.	Year.	Ratio.	Year.	Ratio.
1687	14.94	1722	15.17	1757	14.87	1792	15.17	1827	15.74	1862	15.35
1688	14.94	1723	16.20	1768	14.85	1793	15.00	1828	15.78	1863	15.37
1689	15.02	1724	15.11	1759	14.15	1794	15.37	1829	15.78	1864	15.37
1690	15.09	1725	15.11	1760	14.14	1795	15.55	1830	15.82	1865	15.44
1691	14.98	1726	15.15	1761	14.54	1796	15.65	1831	15.72	1866	15.43
1692	14.92	1727	15.24	1762	15.27	1797	15.41	1832	15.73	1867	15.67
1693	14.83	1728	15.11	1763	14.99	1798	15.59	1833	15.93	1868	15.59
1694	14.87	1729	14.92	1764	14.70	1799	15.74	1834	15.73	1869	15.60
1695	15.02	1730	14.81	1765	14.83	1800	15.68	1835	15.80	1870	15.57
1696	15.00	1731	14.94	1766	14.80	1801	15.46	1836	15.72	1871	15.57
1697	15.20	1732	15.09	1767	14.85	1802	15.26	1837	15.83	1872	15.63
1698	15.07	1733	15.18	1768	14.80	1803	15.41	1838	15.85	1873	15.92
1699	14.94	1734	15.39	1769	14.72	1804	15.41	1839	15.62	1874	16.17
1700	14.81	1735	15.41	1770	14.62	1805	15.79	1840	15.62	1875	16.59
1701	15.07	1736	15.18	1771	14.66	1806	15.52	1841	15.70	1876	17.88
1702	15.52	1737	15.02	1772	14.52	1807	15.43	1842	15.87	1877	17.22
1703	15.17	1738	14.91	1773	14.62	1808	16.08	1843	15.93	1878	17.94
1704	15.22	1739	14.91	1774	14.62	1809	15.96	1844	15.85	1879	18.40
1705	15.11	1740	14.94	1775	14.72	1810	15.77	1845	15.92	1880	18.05
1706	15.27	1741	14.92	1776	14.55	1811	15.53	1846	15.90	1881	18.18
1707	15.44	1742	14.85	1777	14.54	1812	16.11	1847	15.80	1882	18.19
1708	15.41	1743	14.85	1778	14.68	1813	16.26	1848	15.85	1883	18.64
1709	16.31	1744	14.87	1779	14.80	1814	15.04	1849	15.78	1884	18.57
1710	15.22	1745	14.98	1780	14.72	1815	15.26	1850	16.70	1885	19.41
1711	15.29	1746	15.13	1781	14.78	1816	15.28	1851	15.46	1886	20.78
1712	15.31	1747	15.26	1782	14.42	1817	15.11	1852	15.59	1887	21.13
1713	15.24	1748	15.11	1783	14.48	1818	15.35	1853	15.33	1888	21.99
1714	15.13	1749	14.80	1784	14.70	1819	15.33	1854	15.33	1889	22.10
1715	15.11	1750	14.55	1785	14.92	1820	15.62	1855	15.38	1890	19.78
1716	15.09	1751	14.39	1786	14.96	1821	15.95	1856	15.38	1891	20.92
1717	15.13	1752	14.54	1787	14.92	1822	15.80	1857	15.27	1892	23.72
1718	15.11	1753	14.54	1788	14.65	1823	15.84	1858	15.38	1893	26.49
1719	15.09	1754	14.48	1789	14.75	1824	15.82	1859	15.19	1894	32.58
1720	15.04	1755	14.68	1790	15.04	1825	15.70	1860	15.29	1895	31.80
1721	15.05	1756	14.94	1791	15.06	1826	15.76	1861	15.50	1896	30.66

THE RELATIVE PRODUCTION OF GOLD AND SILVER SINCE 1493.

BY FRANCIS B. FORBES.

(*"The Bimetallist," July, 1897.*)

IN the monetary history of the world the nineteenth century will stand out as remarkable in two ways—through an unprecedented development of the output of both precious metals, and through a more or less complete outlawry of silver by a group of great nations. The example of England in 1816 remained isolated for a long time, but the years since 1873 have witnessed something like an epidemic of silver demonetization, which first broke out in the United States and Germany, and has at last spread through other countries as far as Japan.

Among others, one avowed plea has been advanced throughout this whole series of legislative enactments hostile to silver. It has been averred that, with improved processes, man was extracting silver out of the earth so cheaply and in such excessive quantities that the metal was no longer fit to serve as a standard of value. It is curious to recall the analogy of this argument to those adduced by the great French economist, Michel Chevalier, against the gold standard some forty years ago, when floods of new money from California and Australia were fertilising the world of

industry. But it is evident that in both cases the alarm was caused less by an absolute excess of either metal than by a relative over-production of one as compared with the other.

Now, it has always been part of the case of International Bimetallists that this alleged "over-production of silver" never existed in fact, and was without value as an argument for demonetization of the white metal. It is the purpose of these notes to prove our contention by a series of familiar figures, presented in what is, I believe, a new light; and the cold facts of the relative production of the precious metals, as they are given below, are offered for the consideration of our friends of the gold Monometallist camp. In the face of these facts we may fairly ask them to show that, at any time during the last four centuries, the relative money values of gold and silver have been determined, in a large sense, by current *supply*, or by anything else than the *demand* for coinage, created or destroyed by legislation.

The subjoined tables show, in considerable detail, the respective weights of gold and silver extracted from the earth during the 404 years 1493-1896, according to the best available statistics, and the relation between the two quantities period by period. As the most convenient form of presenting this relation a column has been added showing the "weight ratio" of silver to gold.

Except for the years 1895 and 1896, all my figures of production are based upon the statistics in the admirable report, under date of August 20, 1896, of M. de Foville, Director of the French Mint. Previous to the discovery of America by Christopher Columbus history affords few data for trustworthy statistics of the precious metals. Careful estimates have, however, been made by Alexander von Humboldt and A. Soetbeer of the output of gold and silver

since 1492, which M. de Foville deems worthy of reproduction with his own corrections. For the years 1876-1894 the French statistics of production avowedly follow those of the United States Mint reports, from which source I have also taken the output for 1895. Figures for 1896 are from the tables of estimated production in the New York *Financial Chronicle* of February 6, 1897.

STATISTICS OF WORLD'S PRODUCTION OF GOLD AND SILVER FOR THE 404 YEARS 1493-1896.

[Memo.—One kilogram equals 32.15 oz. troy.]

TABLE A.—GENERAL SUMMARY, 1493-1896.

	Gold product, kilograms.	Silver product, kilograms.	Weight ratio of silver product.
World's production from discovery of America to development of gold mining in California and Australia, 1493-1850.	4,752,070	149,826,750	31.5
World's production, forty-six years, 1851-1896	8,767,239	101,845,190	11.7
	<u>13,519,309</u>	<u>251,671,940</u>	<u>18.6</u>

TABLE A.—GENERAL STATISTICS BY CENTURIES.

1493-1600	754,800	22,834,400	30.2
1601-1700	912,300	37,234,000	40.8
1701-1800	1,900,100	57,034,900	30.0
1801-1896	9,952,109	134,568,640	13.5
Aggregate production, 1493-1896	<u>13,519,309</u>	<u>251,671,940</u>	<u>18.6</u>

TABLE B.—PRODUCTION 108 YEARS, 1493-1600.

	Gold product, kilograms.	Silver product, kilograms.	Weight ratio of silver product.
1493-1520	162,400	1,316,000	8·1
1521-1544	171,840	2,164,800	12·6
1545-1560	136,160	4,985,600	36·6
1561-1580	136,800	5,990,000	43·8
1581-1600	147,600	8,378,000	56·8
Aggregate production, 1493-1600	754,800	22,834,400	30·2

TABLE C.—PRODUCTION 100 YEARS, 1601-1700.

1601-1620	170,400	8,458,000	49·6
1621-1640	166,000	7,872,000	47·4
1641-1660	175,400	7,326,000	41·8
1661-1680	185,200	6,740,000	36·4
1681-1700	215,300	6,838,000	31·8
Aggregate production, 1601-1700	912,300	37,234,000	40·8

TABLE D.—PRODUCTION 100 YEARS, 1701-1800.

1701-1720	256,400	7,112,000	27·7
1721-1740	381,600	8,624,000	22·6
1741-1760	492,200	10,662,900	21·7
1761-1780	414,100	13,054,800	31·5
1781-1800	355,800	17,581,200	49·4
Aggregate production, 1701-1800	1,900,100	57,034,900	30·0

TABLE E.—PRODUCTION 96 YEARS, 1801-1896.

1801-1810	177,780	8,941,500	50·3
1811-1820	114,450	5,407,700	47·2
1821-1830	142,160	4,605,600	32·4
1831-1840	202,890	5,964,500	29·4
1841-1850	547,590	7,804,150	14·2
50 years, 1801-1850	1,184,870	32,723,450	27·6

TABLE E.—PRODUCTION 96 YEARS, 1801-1896—*continued*.

	Gold product kilograms	Silver product, kilograms.	Weight ratio of silver product.
1851-1855	996,940	4,430,575	4·4
1856-1860	1,008,750	4,524,950	4·5
1861-1865	925,285	5,505,750	5·9
1866-1870	975,130	6,695,425	6·9
1871-1875	869,520	9,847,125	11·3
25 years, 1851-1875	4,775,625	31,003,825	6·5
1876-1880	830,477	10,979,273	13·2
1881-1885	768,217	13,307,285	17·3
1886-1890	849,312	16,937,362	19·9
1891-1895	1,227,450	24,608,571	20·0
1896	316,158	5,008,874	15·8
21 years, 1876-1896	3,991,614	70,841,365	17·7
Aggregate production, 1801-1896	9,952,109	134,568,640	13·5

TABLE F.—ANNUAL PRODUCTION FOR 21 YEARS, 1876-1896.

1876.....	156,028	2,107,325	13·5
1877.....	171,446	1,949,533	11·4
1878.....	179,188	2,282,508	12·7
1879.....	163,669	2,313,550	14·1
1880.....	160,146	2,326,357	14·5
1881.....	155,009	2,457,786	15·8
1882.....	153,465	2,689,541	17·5
1883.....	143,527	2,773,611	19·3
1884.....	153,063	2,537,003	16·6
1885.....	163,153	2,849,344	17·5
10 years, 1876-1885	1,598,694	24,286,558	15·2
1886.....	159,735	2,901,826	18·2
1887.....	159,150	2,989,732	18·8
1888.....	165,803	3,384,865	20·4
1889.....	185,803	3,739,004	20·1
1890.....	178,821	3,921,935	21·9

TABLE F.—ANNUAL PRODUCTION, ETC.—*continued*.

	Gold product, kilograms.	Silver product, kilograms.	Weight ratio of silver product.
1891.....	196,577	4,226,427	21.5
1892.....	220,899	4,763,479	21.6
1893.....	236,662	5,165,961	21.8
1894.....	271,768	5,217,608	19.2
1895.....	301,544	5,235,096	17.3
10 years, 1886-1895	2,076,762	41,545,933	20.0
1896.....	316,158	5,008,874	15.8
Aggregate production, 21 years, 1876-1896	3,991,614	70,841,365	17.7

The 404 years for which statistics are given above are distinctly separated into two periods—very widely contrasted; the first, from the discovery of America in 1492 till the development of Californian and Australian gold mining in 1850; and the second, the recent years 1851-1896. During the first 358 years the total product was about 4,750,000 kilograms of gold and nearly 150,000,000 kilograms of silver, the weight of silver having therefore been 31.5 times that of the gold output. On the other hand, during the last forty-six years, with an enormous increase in the annual output of both metals, nearly twice as much gold, but only about two-thirds as much silver, has been produced as during the preceding three centuries. The “weight ratio” of silver product during the very period which has witnessed its demonetization in country after country has accordingly been only 11.7—that is to say, three-eighths of the “weight ratio” during the first period.

WHAT IS THE BRITISH SYSTEM OF CURRENCY?

“PEOPLE talk of leaving well alone, and they talk of the excellence of the British system of currency. What is the British system of currency? We are an empire, as we are proud to think, with interests and possessions in every part of the world. I concentrate my attention, not upon the self-governing colonies, which, for the purpose of this currency, may be described as independent of us, but I fix my attention on those parts of our great empire which are practically under the rule of the British Parliament, and what is the system of currency? You go to Hong Kong and the Straits Settlements, and you find obligations are measured and debts are paid in silver; you go to England, and you find that obligations are measured and debts are paid in gold; you stop halfway, in India, and you find that obligations are measured and debts are paid in something which is neither gold nor silver—the strangest product of monometallist ingenuity which the world has ever seen—a currency which is as arbitrary as any forced paper currency which the world has ever heard of, and which is as expensive as any metallic currency that the world has ever faced, and which, unhappily, combines in itself all the disadvantages of every currency which human beings have ever tried to form. That is what we call the British system of currency, and we are expected to carry on to the best advantage—I will not say foreign

trade, but trade with our own colonies and our own dependencies with a standard—with three standards, two varying according to the accidents of natural production, the other varying according to the arbitrary will of the Secretary of State for India. Now, it is absurd to say that this is a system which cannot be improved. It is a ridiculous system, and, therefore, if we concentrate our attention upon ourselves alone—upon the British Empire, that part of it which is practically governed from Westminster—I say that some alteration is imperatively required.”—*Right Honourable A. J. Balfour, Mansion House, E.C., April 3rd, 1895.*

ADVANTAGE TO PRODUCTIVE INDUSTRIES OF ADDITIONAL SUPPLIES OF INTERNATIONAL METALLIC CURRENCY.

TOOKE and Newmarch, in their work the *History of Prices*, in reference to the effect upon productive industries of the influx of Silver into Europe from the New World in the sixteenth century, write :—

“We have the fullest warrant for concluding that any partial inconvenience that might arise from the effect of the American supplies of the sixteenth century in raising prices was compensated and repaid a hundredfold by the activity, the expansion and vigour which they impressed for more than one generation upon every enterprise and every act which dignifies human life or increases human happiness.”

The same writers, in regarding the effects of the increase in the currency following on the gold discoveries in California in 1848, and Australia in 1851, say :—

“The rapid increase in railways in every part of the world ; the improvements in the navigation and speed of ships ; the rapid spread of population into new and fertile regions ; the quick succession of important discoveries in practical science ; and the ceaseless activity with which they are applied to increase the efficiency of all mechanical appliances ; and, perhaps more powerful than all, the setting free of the enterprise, the industry, and the ingenuity of some of the leading commercial states by the adoption, more or less completely, of principles of Free Trade, are all causes which,

singly and conjointly, have assisted to accelerate the rate of progress; [but with all this] the influence of the new supplies of gold, year by year, has probably been that particular cause, or train of causes, which has modified in the most powerful degree the economical and commercial history of the last nine years."

Professor J. Shield Nicholson, M.A., D.Sc., Professor of Political Economy in Edinburgh University, writes as follows on the same subject in his work *Money and Monetary Problems*:—

"In the first place, we have seen how the new supplies, in the one case of Silver, in the other of Gold, gave a real and generous stimulus to the industrial activity of the world. The rise in prices which occurred was not, as we are too often told, merely equivalent to a nominal change of values, and a benefit to debtors at the expense of creditors; for as soon as prices began to move in response to the new money, enterprise was quickened, employment extended, and production increased. If in the sixteenth century the trading nations had been afraid of the depreciation of the new silver, and had refused to use it as standard money in unlimited payments, the mediæval system might have retained its immobility for many generations, whilst the only gain to the world would have been a profusion of cheap silver ornaments; and in the nineteenth century, if the nations had listened to the alarmists who urged them to take time by the very tip of the forelock and demonetize their gold before it became worthless through depreciation, America and California would have been left to sheep and cattle, the enormous expansion of trade which took place over the whole world would have been impossible, and the only gain would have been an addition to the stock of gold plate of those who held mortgages in one shape or another over the old industries of the world. But if an increase in the supplies of the precious metals, when freely coined, has the effect which history reveals, surely it does not require much reason or much imagination to discover that, with diminishing supplies of gold, and a refusal to use silver, the contrary effects—in a word, a dragging depression of trade—might be expected."

Professor F. A. Walker, who also quotes Professor Cairnes, says :—

“The metallic inflation of the sixteenth and seventeenth centuries put an end to the long life-in-death of the Middle Ages. Perhaps it was the very sharpness of the shock which broke up the lethargy which had settled upon the industrial spirit and the productive powers of Europe. The increase of the money supply contributed greatly to the rise and growth of the maritime power of Great Britain, and, in the language of an economist so careful as Professor Cairnes, ‘it supplied and rendered possible the remarkable expansion of Oriental trade which forms the most striking commercial fact of the age that followed.’ Among more strictly political results of this great movement can be traced in clear lines the hastening decay of the feudal power, the increasing dependence of the sovereign upon his people for the supplies which his hereditary domains no longer furnished in sufficiency, and the rising spirit of self-assertion on the part of the commercial and mechanical classes.”

THE FALL IN THE PRICE OF WHEAT NOT DUE TO INCREASED PRODUCTION.

(Extract from Supplementary Report, signed by 10 out of 14 Commissioners—Final Report of Royal Commission on Agriculture, 1897.)

WE have examined the extent and distribution, the causes and effects, of agricultural depression, and we have expressed the view, on which the evidence is practically unanimous, that the fall in the prices of produce is primarily responsible for that depression. The evidence we have taken shows that by most of the witnesses the fall in prices is attributed to increased facilities and lessened cost of production, to the opening of new countries, to improved facilities of transport, and consequently to increased foreign competition, which they regard as the source and origin of their troubles.

Others, again, representing the opinions of a considerable, and, so far as we can judge, a steadily increasing section of the agricultural community, attribute the fall in great measure to a change which has occurred not so much in circumstances affecting products or commodities, as in the value of money itself since the abandonment in 1873 and 1874 of the bimetallic system, which formerly prevailed in certain countries on the Continent and in the United States of America.

With regard to the main cause to which agricultural depression is most commonly attributed by the majority of witnesses, it is true, of course, that during the past twenty

years vast areas of land in various countries have been brought into cultivation, and now supply enormous quantities of food which was not produced before; and, concurrently with this increased production, facilities for its transport have also been constantly increasing.

We cannot doubt that to some extent, and possibly to a considerable extent, the prices of agricultural produce have been affected by this process, but it must also be remembered that during the same period the population of the world has immensely increased, and an enormous increase of production has necessarily been required for them; and although some witnesses have urged that the fall in prices is largely due to over-production, we have had no evidence, and we greatly question if such evidence could be adduced, to show that, compared with the increase of population, the food products of the world to-day are materially greater than they were before the fall in prices commenced.

In the case of wheat, indeed—the commodity which perhaps has fallen more in price than any other—the information which we have appears to point in the opposite direction.

Such statistics as are available tend to the conclusion that while the average price of wheat in 1895 was the lowest upon record for many generations, the wheat crop of the world was less in 1895 than in either of the two preceding years.

The same view is confirmed by the opinions of our colleague, Sir Robert Giffen, and by the evidence of Major Craigie (Assistant Secretary to the Board of Agriculture).

In an able and interesting memorandum by our colleague [Sir Robert Giffen] on the real agricultural development of the last twenty years, he writes as follows :

“Speaking broadly, the figures clearly suggest that the

decline in wheat during the last twenty years is not due to any great growth of production in excess of the growth of the consuming population. The facts are rather the other way; the growth of the acreage under wheat has lagged behind the growth of population."

Major Craigie in his evidence also stated his impression, from such figures as were available, that there had been no increase in the wheat area to correspond to the increase of the wheat-consuming population of the world.

A MEANS OF ARRESTING THE CONSTANT FALL IN PRICES.

(Extract from Supplementary Report, signed by 10 out of 14 Commissioners—Final Report of Royal Commission on Agriculture, 1897.)

WE have considered the question of protection, but, for the reasons we have given, we confess we are not sanguine of a remedy in that direction.

We have also made a number of recommendations upon a variety of matters which have been summarised in the Report that we have signed, all of which appear to us to be good and desirable in themselves, but it is not contended that they affect the question of depression, which has been due to a collapse in prices.

There only remains, so far as we can judge, the question whether, and how far, relief is possible by a reversal of the monetary policy, to which so many of our witnesses attribute the disaster which has fallen upon agriculture. But a change in this direction could only be accomplished by an international arrangement.

What should be the terms of the arrangement, and to what extent this country should engage in it, either directly or by her Indian possessions, it is not for us to say. Indeed it is a question which involves such grave considerations and affects so many and such diverse interests that we hesitate to pronounce an opinion upon it. But we are persuaded

that it is a subject of the gravest interest to the agricultural future of this country.

We do not suggest that the Gold Standard should be abandoned in this country, but we think that if a conference of the Powers was assembled, and that its deliberations resulted in an international arrangement for the re-opening of the mints abroad and in India, and the restoration of silver, either wholly or partially, to the position which it filled prior to 1873, it would be of the greatest benefit to the industry of agriculture.

With the object, therefore, of promoting such a conference, we think that Your Majesty's Government should heartily co-operate with Foreign Powers, and thereby give effect to the unanimous resolution of the House of Commons on February 26, 1895, which we desire to endorse.

We think that if an international arrangement for the purposes which we have specified was arrived at the long-continued fall in prices, which is the admitted source of agricultural trouble, would be checked, and that if there should be any future movement in the course of prices they would tend to rise rather than to fall.

We make this recommendation, after a prolonged and careful consideration of the grave question which has been referred to us, because we are unable to perceive the signs of any spontaneous and permanent change in this direction, and we see no other prospects of arresting that constant and progressive fall in prices which by universal admission has been the cause which lies at the root of agricultural depression.

THE GENERAL FALL OF PRICES AN APPRECIATION OF GOLD.

*(Extract from Memorandum by Sir Robert Giffen—Final Report of
Royal Commission on Agriculture, 1897.)*

“It is a great misfortune, I consider, that some monometallists, as appeared in the course of the evidence before this Commission, have refused, and still refuse, to recognise the general fall of prices in the last quarter of a century as being, in economic language, an appreciation of gold, and as being explained by a contraction of gold (*as compared with a previous period of expansion*), which commenced about the year 1873. The facts are all beyond dispute, and if language is only used with the ordinary meaning, as employed by economists like Adam Smith and Jevons, and many others who have discussed historic changes of prices, no one would say for a moment that there has not been an appreciation of gold in the last twenty-five years, and that this does not necessarily involve, dealing with the matter historically, a contraction of gold. All this can be said, also, without implying any objection to the proposition so largely supported in the main report, that foreign competition is the cause of the present agricultural depression, and that the progress of invention, cheapening of means of communication, and the like influences are to be regarded as permanent causes of lower and lower prices. There is nothing inconsistent between this latter view and the view that the contraction of gold during the last quarter of a century is connected with the course of prices. The crux of the

question is that, whereas for twenty years before 1873, owing to the state of the gold supply and demand, the progress of invention, cheapening of means of communication, and the like influences were attended by no general fall of prices, but prices rather advanced, now, owing to the difference in the conditions of gold supply and demand, the progress of invention, cheapening of means of communication, and the like influences have been accompanied by a fall of prices. In other words, the phenomenon to be explained is why the causes referred to produced no fall of prices before 1873, but were even found consistent with a rise, and why they produced a fall after 1873. In insisting so much, then, on the progress of invention, &c., as causing a fall of prices in recent years, to the exclusion of all reference to money conditions, monometallists give their case away. They assail that very portion of the bimetallist case where bimetallists have the authority of almost every economist who studied the history of prices prior to the recent controversies, and they weaken their general position by so doing. They should have attacked bimetallist exaggerations only on this head, and not the general case of gold appreciation. Having written on the question of the fall of prices, not only before the present bimetallic controversy began, but in anticipation of the fall of prices itself—my reasons for anticipating the fall being based mainly on monetary considerations, although the question of the progress of invention and multiplication of commodities was not, and could not be, overlooked—I have especial cause to regret that some of my monometallic friends, in their eagerness to overwhelm bimetallists, have treated every statement as bad which bimetallists use. This evident weakness in the monometallist arguments has been the main reason, I believe, why the bimetallic agitation has continued so long."

EXTRACTS FROM THE FINAL REPORT OF
THE ROYAL COMMISSION ON GOLD AND
SILVER, 1888.

PART I.

Signed by all the Members of the Commission.

Sec. 115.—"The remedy which has been put before us most prominently, and as most likely to remedy the evils complained of to the fullest extent possible, is that known as Bimetallism."

Sec. 186.—"It must be borne in mind that in the case of other commodities (than Gold and Silver) the effect of changes in the supply and demand is both more marked and more immediate. These commodities are generally produced for the purpose of consumption at an early date or within a comparatively short period. The supply at any time available for the market, or capable of being placed on it at short notice, is therefore a very important element in the process by which its value is fixed.

"The precious metals, on the other hand, are but to a slight extent consumed, and the available supply consists of the accumulations of previous years.

"It follows, therefore, that in their case a diminution or an increase in the new supply is of less importance than in the case of consumable articles, and that an increase or diminution in demand has also a smaller effect. The

important consideration with regard to them at any one moment is rather the relation between the total stock then in existence and the then existing demands upon it."

Sec. 189.—"Looking, then, to the vast changes which occurred prior to 1873 in the relative production of the two metals without any corresponding disturbance in their market value, it appears to us difficult to resist the conclusion that some influence was then at work tending to steady the price of silver, and to keep the ratio which it bore to gold approximately stable."

Sec. 190.—"Prior to 1873 the fluctuations in the price of silver were gradual in their character, and ranged within very narrow limits. The maximum variation in 1872 was $\frac{5}{8}d.$ and the average not quite $\frac{5}{16}d.$, while in 1886 the maximum was $2\frac{9}{16}d.$ and the average nearly $1\frac{1}{8}d.$ It has not been, and indeed hardly could be suggested, that this difference can be accounted for by changes in the relative production or actual use of the two metals."

Sec. 191.—"The explanation commonly offered of these constant variations in the silver market is that the rise or depression of the price of silver depends upon the briskness or slackness of the demand for the purpose of remittance to silver-using countries, and that the price is largely affected by the amount of the bills sold from time to time by the Secretary of State for India in Council.

"But these causes were, as far as can be seen, operating prior to 1873, as well as subsequent to that date, and yet the silver market did not display the sensitiveness to these influences from day to day and month to month which it now does."

Sec. 192.—"These considerations seem to suggest the existence of some steadying influence in former periods which has now been removed, and which has left the

silver market subject to the free influence of causes the full effect of which was previously kept in check. The question therefore forces itself upon us:—Is there any other circumstance calculated to affect the relation of silver to gold which distinguishes the latter period from the earlier?

“Now, undoubtedly the date which forms the dividing line between an epoch of approximate fixity in the relative value of gold and silver and one of marked instability is the year when the bimetallic system which had previously been in force in the Latin Union ceased to be in full operation; and we are irresistibly led to the conclusion that the operation of that system, established as it was in countries the population and commerce of which were considerable, exerted a material difference upon the relative value of the two metals.

“So long as that system was in force we think that, notwithstanding the changes in the production and use of the precious metals, it kept the market price of silver approximately steady at the ratio fixed by law between them, namely $15\frac{1}{2}$ to 1.”

Sec. 193.—“Nor does it appear to us *a priori* unreasonable to suppose that the existence in the Latin Union of a bimetallic system with a ratio of $15\frac{1}{2}$ to 1 fixed between the two metals should have been capable of keeping the market price of silver steady at approximately that ratio.

“The view that it could only affect the market price to the extent to which there was a demand for it for currency purposes in the Latin Union, or to which it was actually taken to the mints of those countries, is, we think, fallacious.

“The fact that the owner of silver could, in the last resort, take it to those mints and have it converted into coin which would purchase commodities at the ratio of $15\frac{1}{2}$ of silver to one of gold would, in our opinion, be likely to affect the

price of silver in the market generally, whoever the purchaser and for whatever country it was destined. It would enable the seller to stand out for the price approximating to the legal coin, and would tend to keep the market steady at about that point."

PART II.

Signed by six Members of the Commission :—

Lord HERSCHELL.

Hon. Sir C. W. FREMANTLE, K.C.B.

Rt. Hon. Sir JOHN LUBBOCK, Bart., M.P.

Sir T. H. FARRER, Bart.

Mr. J. W. BIRCH.

Rt. Hon. LEONARD H. COURTNEY, M.P.

Sec. 9.—"However much opinions may differ as to the extent of the evil arising from the increased difficulty which a fluctuating exchange interposes, we do not think its reality is open to question."

Sec. 101.—"There cannot be two opinions as to the very serious effect which the continued fall in the gold price of silver has had on the finances of the Government of India."

Sec. 102.—"We are fully impressed with a sense of the difficulties which surround the Indian Government, and of the serious questions to which any proposed additional tax must give rise. It is not only the embarrassment which has already been caused to the Government of India that has to be borne in mind, but the impossibility of foreseeing to what extent those embarrassments may be increased, and their difficulty augmented, by a further depression in the value of silver."

Sec. 107.—"We think that in any conditions fairly to be contemplated in the future, so far as we can forecast them from the experience of the past, a stable ratio might be maintained if the nations we have alluded to* were to accept

* The United Kingdom, Germany, the United States, and the Latin Union.

and strictly adhere to bimetallism, at the suggested ratio. We think that if in all these countries gold and silver could be freely coined, and thus become exchangeable against commodities at the fixed ratio, the market value of silver as measured by gold would conform to that ratio, and not vary to any material extent."

Sec. 119.—"Apprehensions have been expressed that if a Bimetallic system were adopted gold would gradually disappear from circulation. If, however, the arrangement included all the principal commercial nations, we do not think there would be any serious danger of such a result.

"Such a danger, if it existed at all, must be remote. It is said, indeed, by some that if it were to happen, and all nations were to be driven to a system of silver monometallism, the result might be regarded without dissatisfaction.

"We are not prepared to go this length, but at the same time we are fully sensible of the benefits which would accrue from the adoption of a common monetary standard by all the commercial nations of the world, and we are quite alive to the advantage of the adoption by these nations of a uniform Bimetallic Standard as a step in that direction."

PART III.

Signed by the other six Members of the Commission:—

Rt. Hon. Sir LOUIS MALLET, C.B.	Sir D. BARBOUR, K.C.S.I.
Rt. Hon. A. J. BALFOUR, M.P.	Sir W. H. HOULDSWORTH, Bart., M.P.
Rt. Hon. HENRY CHAPLIN, M.P.	Mr. SAMUEL MONTAGU, M.P.

Sec. 28.—"We think that the above remarks upon the evils affecting both the United Kingdom and India, if taken in connection with the more detailed statement in Part I. of the Report, will sufficiently indicate our views as to their nature and gravity; and that they are largely due to the

currency changes which have taken place in the years immediately preceding and following 1873.

"We think that too much stress cannot be laid upon the novelty of the experiment which has been attempted as the result of the above changes. That experiment consists in the independent and unregulated use of both gold and silver as standards of value by the different nations of the world.

"We are strongly of opinion that both metals must continue to be used as standard money; the results of using them separately and independently since 1873 have been most unsatisfactory, and may be positively disastrous in the future.

"It cannot be questioned that until 1873 gold and silver were always effectively linked by a legal ratio in one or more countries.

"It is equally indisputable that the relative value of the two metals has been subject to greater divergence since 1874 than during the whole of the 200 years preceding that date, notwithstanding the occurrence of variations in their relative production more intense and more prolonged than those which have been experienced in recent years."

Sec. 29.—"In 1873-74 the connecting link disappeared, and for the first time the system of rating the two metals ceased to form a subject of legislation in any country in the world.

"The law of supply and demand was for the first time left to operate independently upon the value of each metal; and simultaneously the ratio which had been maintained, with scarcely any perceptible variation, for 200 years, gave place to a marked and rapid divergence in the relative value of gold and silver, which has culminated in a change from $15\frac{1}{2}$ to 1 to 22 to 1."

PROPOSED REMEDY.

Sec. 30.—"It appears to us impossible to attribute the concurrence of these two events to a merely fortuitous coincidence. They must, in our opinion, be regarded as standing to each other in the relation of cause and effect.

"We cannot therefore doubt that if the system which prevailed before 1873 were replaced in its integrity most of the evils which we have above described would be removed, and the remedy which we have to suggest is simply the reversion to a system which existed before the changes above referred to were brought about—a system, namely, under which both metals were freely coined into legal tender money at a fixed ratio over a sufficiently large area.

"The effects of that system, though it was nominally in force only within a limited area, were felt in all commercial countries, whatever their individual systems of currency might be; and the relative value of the two metals in all the markets of the world was practically identical with that fixed by the legislation of the countries forming the Latin Union.

"As regards the possibility of maintaining such a system in the future, we need only refer to the conclusion at which our colleagues have arrived in *Sec. 107, Part II.* (see above), and with which we entirely agree."

Sec. 34.—"No settlement of the difficulty is, however, in our opinion, possible without international action.

"The remedy which we suggest is essentially international in its character, and its details must be settled in concert with the other Powers concerned.

"It will be sufficient for us to indicate the essential features of the agreement to be arrived at, namely—

- (1) Free coinage of both metals into legal tender money ; and
- (2) The fixing of a ratio at which the coins of either metal shall be available for the payment of all debts at the option of the debtor."

Sec. 35.—"The particular ratio to be adopted is not, in our opinion, a necessary preliminary to the opening of negotiations for the establishment of such an agreement, and can, with other matters of detail, be left for further discussion and settlement between the parties interested.

"We therefore submit that the chief commercial nations of the world, such as the United States, Germany, and the States forming the Latin Union, should in the first place be consulted as to their readiness to join with the United Kingdom in a conference, at which India and any of the British Colonies which may desire to attend should be represented, with a view to arrive, if possible, at a common agreement on the basis above indicated."

Sec. 36.—"We have indicated what appears to us to be the only permanent solution of the difficulties arising from the recent changes in the relative value of the precious metals, and the only solution which will protect this and other countries against the risks of the future."

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